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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

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| | | |
|---|---|---|
| NEWS 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS 2 | MAR 15 | WPIDS/WPIX enhanced with new FRAGHITSTR display format |
| NEWS 3 | MAR 16 | CASREACT coverage extended |
| NEWS 4 | MAR 20 | MARPAT now updated daily |
| NEWS 5 | MAR 22 | LWPI reloaded |
| NEWS 6 | MAR 30 | RDISCLOSURE reloaded with enhancements |
| NEWS 7 | APR 02 | JICST-EPLUS removed from database clusters and STN |
| NEWS 8 | APR 30 | GENBANK reloaded and enhanced with Genome Project ID field |
| NEWS 9 | APR 30 | CHEMCATS enhanced with 1.2 million new records |
| NEWS 10 | APR 30 | CA/CAplus enhanced with 1870-1889 U.S. patent records |
| NEWS 11 | APR 30 | INPADOC replaced by INPADOCDB on STN |
| NEWS 12 | MAY 01 | New CAS web site launched |
| NEWS 13 | MAY 08 | CA/CAplus Indian patent publication number format defined |
| NEWS 14 | MAY 14 | RDISCLOSURE on STN Easy enhanced with new search and display fields |
| NEWS 15 | MAY 21 | BIOSIS reloaded and enhanced with archival data |
| NEWS 16 | MAY 21 | TOXCENTER enhanced with BIOSIS reload |
| NEWS 17 | MAY 21 | CA/CAplus enhanced with additional kind codes for German patents |
| NEWS 18 | MAY 22 | CA/CAplus enhanced with IPC reclassification in Japanese patents |
| NEWS 19 | JUN 18 | CA/CAplus to be enhanced with pre-1967 CAS Registry Numbers |

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

| | |
|---|---|
| NEWS HOURS | STN Operating Hours Plus Help Desk Availability |
| NEWS LOGIN | Welcome Banner and News Items |
| NEWS IPC8 | For general information regarding STN implementation of IPC 8 |

Enter NEWS followed by the item number or name to see news on that specific topic.



* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 07:41:53 ON 27 JUN 2007

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 07:42:03 ON 27 JUN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 JUN 2007 HIGHEST RN 939408-72-7
DICTIONARY FILE UPDATES: 26 JUN 2007 HIGHEST RN 939408-72-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10509919a.str

chain nodes :
11 12 19 20 21 22 23 24 25 26 29 31 32
ring nodes :
1 2 3 4 5 6 7 8 9 13 14 15 16 17 18
chain bonds :
1-22 2-21 3-20 4-19 7-26 8-29 9-11 11-12 11-13 14-25 15-31 16-32 17-24
18-23
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 13-14 13-18 14-15 15-16 16-17
17-18
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 6-9 7-26 8-29 11-12 15-31 16-32
exact bonds :
1-22 2-21 3-20 4-19 5-7 7-8 8-9 9-11 11-13 14-25 17-24 18-23
normalized bonds :
13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 13 :

G1:C,O,N,OH

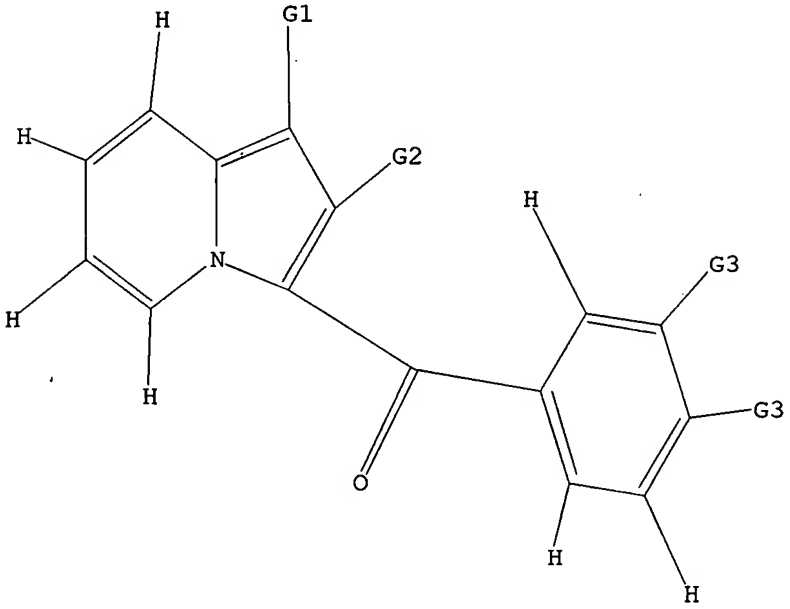
G2:C,H,O

G3:C,H,O,S,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS
12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 29:CLASS 31:CLASS
32:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR




G1 C,O,N,OH

G2 C,H,O

G3 C,H,O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 07:42:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 153 TO ITERATE

100.0% PROCESSED 153 ITERATIONS 14 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2318 TO 3802
PROJECTED ANSWERS: 56 TO 504

L2 14 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 07:42:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3202 TO ITERATE

100.0% PROCESSED 3202 ITERATIONS 279 ANSWERS
SEARCH TIME: 00.00.01

L3 279 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'CAPLUS' ENTERED AT 07:42:32 ON 27 JUN 2007
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FILE COVERS 1907 - 27 Jun 2007 VOL 147 ISS 1
FILE LAST UPDATED: 26 Jun 2007 (20070626/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l3 full
L4 55 L3

=> d ibib abs hitstr 1-10

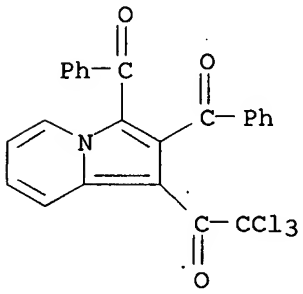
L4 ANSWER 1 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1135210 CAPLUS
DOCUMENT NUMBER: 146:45461
TITLE: Reaction of hexachloroacetone with activated acetylenes in the presence of N-heterocycles. Synthesis of trichloromethylated bridgehead N-heterocycles
AUTHOR(S): Yavari, Issa; Sabbaghan, Maryam; Hossaini, Zinatossadat
CORPORATE SOURCE: Chemistry Department, Tarbiat Modarres University, Tehran, Iran
SOURCE: Synlett (2006), (15), 2501-2503
CODEN: SYNLES; ISSN: 0936-5214
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:45461
AB Pyridine reacts smoothly with hexachloroacetone (HCA) in the presence of dialkyl acetylenedicarboxylates or dibenzoylacetylene to produce

indolizines. Under similar conditions, isoquinoline led to oxazino[2,3-a]isoquinolines and/or pyrrolo[2,1-a]isoquinolines. 3,3-Bis(trichloromethyl)-3H,4aH-[1,3]oxazino[2,3-a]quinoline-1,2-dicarboxylate or 1-methyl-7-(2,2,2-trichloroacetyl)-1H-pyrrolo[1,2-a]imidazole-5,6-dicarboxylate was obtained from the reaction of quinoline or N-methylimidazole with acetylenedicarboxylate in the presence of HCA.

IT 916486-34-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of bicyclic nitrogen hetarenes by reaction of perchloroacetone with activated acetylenes in presence of heterocycles)

RN 916486-34-5 CAPLUS

CN Ethanone, 2,2,2-trichloro-1-(2,3-dibenzoyl-1-indolizinyl)- (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:430765 CAPLUS

DOCUMENT NUMBER: 145:124452

TITLE: Preparation of indolizine-1-carboxylic acid derivatives from pyridine ylide and electron deficient olefin

INVENTOR(S): Wang, Bingxiang; Xu, Zhuxiong; Yuan, Sheng; Dai, Yijun; Shen, Jian

PATENT ASSIGNEE(S): Nanjing Normal University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp. CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| CN 1763039 | A | 20060426 | CN 2005-10094358 | 20050915 |

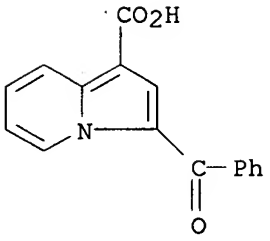
PRIORITY APPLN. INFO.: CN 2005-10094358 20050915

AB Indolizine-1-carboxylic acid derivs. are prepared by carrying out 1,3-dipole cycloaddn. of pyridine Ylide and electron deficient olefin (e.g. acrylate, acrylonitrile, or acrylamide) in solvent (e.g. benzene, toluene, dimethylbenzene, etc.) in the presence of oxidant (air, oxygen, or Cr (VI) compound, etc.) to obtain an indolizine derivative followed by hydrolysis.

IT 25627-87-6P
RL: IMF (Industrial manufacture); PREP (Preparation)
(Preparation of indolizine-1-carboxylic acid derivs. from pyridine ylide and electron deficient olefin)

RN 25627-87-6 CAPLUS

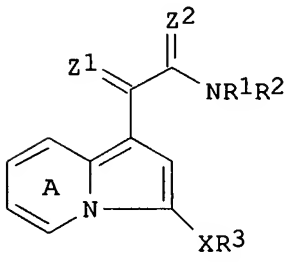
CN 1-Indolizinecarboxylic acid, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1154430 CAPLUS
DOCUMENT NUMBER: 143:416211
TITLE: 1-Glyoxylamide indolizines for treating lung and ovarian cancer
INVENTOR(S): Li, Hao; Koya, Keizo; Sun, Lijun
PATENT ASSIGNEE(S): Syntha Pharmaceuticals, Corp., USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005099824 | A1 | 20051027 | WO 2005-US9519 | 20050322 |
| WO 2005099824 | A8 | 20060413 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2005272766 | A1 | 20051208 | US 2005-88253 | 20050323 |
| PRIORITY APPLN. INFO.: | | | US 2004-557467P P | 20040330 |

OTHER SOURCE(S): MARPAT 143:416211
GI



I

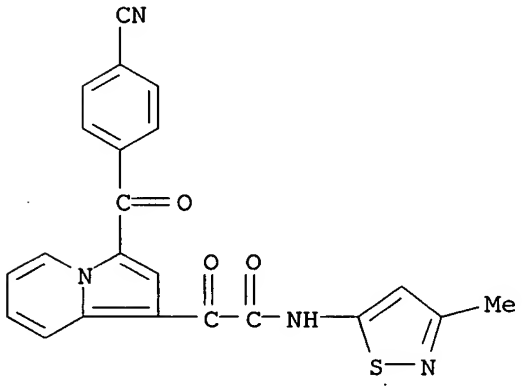
AB A method of treating a subject having lung cancer or ovarian cancer is disclosed, comprising administering to the subject an effective amount of a compound represented by Structural Formula (I) or a pharmaceutically acceptable salt, solvate, or polymorph thereof: Ring A is substituted or unsubstituted and optionally fused to an aryl group. Z1 and Z2 are

independently O, S, N-OR12 or NR12; R1 and R2 are independently -H, an aliphatic group, a substituted aliphatic group, an unsubstituted non-aromatic heterocylic group, a substituted non-aromatic heterocylic group, an aryl group or a substituted aryl group, provided that R1 and R2 are not both -H. Alternatively, -NR1R2, taken together, is a substituted or unsubstituted non-aromatic nitrogen-containing heterocyclic group or a substituted or unsubstituted nitrogen-containing heteroaryl group. R3 is a substituted or unsubstituted aryl group or a substituted or unsubstituted aliphatic group. X is a covalent bond, -C(R4R5)-, -N(R4)-, -O-, -S-, -S(O)-, -S(O)2-, -C( = O)-, -C( = O)-N(R4)-, or -N(R4)-C( = O)-. R4 and R5 are independently -H or a substituted or unsubstituted aliphatic group. R12 is -H or a substituted or unsubstituted alkyl group.

IT 501948-27-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(1-glyoxylamide indolizines for treating lung and ovarian cancer)

RN 501948-27-2 CAPLUS

CN 1-Indolizineacetamide, 3-(4-cyanobenzoyl)-N-(3-methyl-5-isothiazolyl)-α-oxo- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:731272 CAPLUS

DOCUMENT NUMBER: 143:206426

TITLE: Use of 1,2,3-substituted indolizine derivatives as FGF inhibitors for the preparation of drugs for the treatment of diseases connected with pathological choroidal angiogenesis

INVENTOR(S): Badorc, Alain; Bono, Francoise; Bordes, Marie Francoise; Foidart, Jean Michel; Guillo, Nathalie; Noel, Agnes; Rakic, Jean Marie

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: Fr. Demande, 25 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent

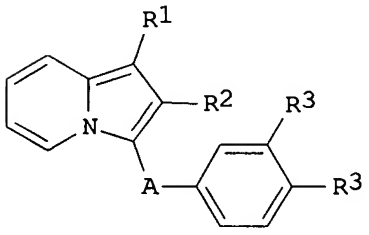
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2865934 | A1 | 20050812 | FR 2004-1094 | 20040205 |
| FR 2865934 | B1 | 20060505 | | |
| AU 2005216671 | A1 | 20050909 | AU 2005-216671 | 20050204 |
| CA 2553895 | A1 | 20050909 | CA 2005-2553895 | 20050204 |

WO 2005082457 A2 20050909 WO 2005-FR253 20050204
WO 2005082457 A3 20051110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1713543 A2 20061025 EP 2005-717556 20050204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU
CN 1917922 A 20070221 CN 2005-80004150 20050204
IN 2006KN02105 A 20070518 IN 2006-KN2105 20060726
PRIORITY APPLN. INFO.: FR 2004-1094 A 20040205
WO 2005-FR253 W 20050204
OTHER SOURCE(S): MARPAT 143:206426
GI



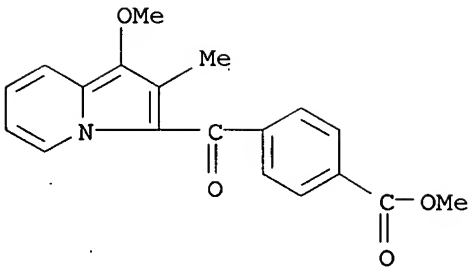
I

AB The invention discloses the use of 1,2,3-substituted indolizine derivs. I (R1 = OH, C1-5 alkoxy, carboxy, etc.; R2 = H, C1-5 alkyl, C3-6 cycloalkyl, etc.; A =CO, SO, SO2; R3, R4 = H, C1-5 alkoxy, amino, carboxy, etc.), or a pharmaceutically acceptable salt thereof, for the preparation of a medicament useful for the treatment of diseases related to pathol. choroidal angiogenesis.

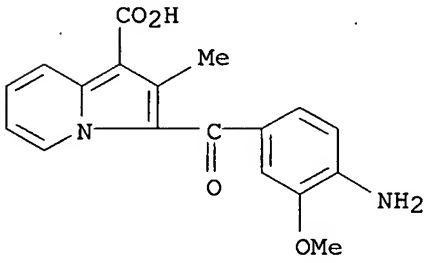
IT 610765-84-9 610766-65-9 610766-66-0
610767-08-3 724700-78-1 727650-85-3
736133-23-6 741669-12-5 778573-49-2
848318-25-2 848463-13-8 862156-48-7
862156-49-8 862156-50-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(indolizine derivative FGF inhibitors for treatment of diseases connected with pathol. choroidal angiogenesis)

RN 610765-84-9 CAPLUS

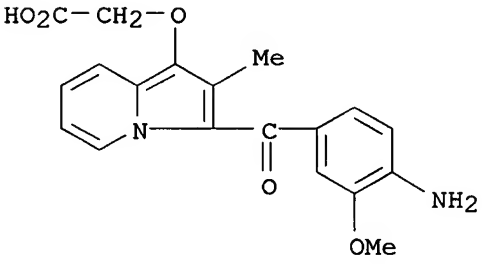
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



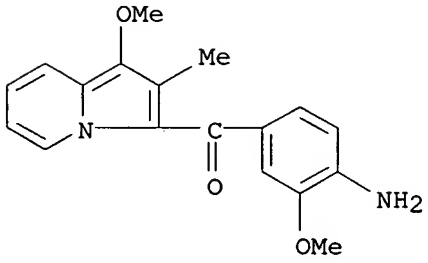
RN 610766-65-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl- (9CI) (CA INDEX NAME)



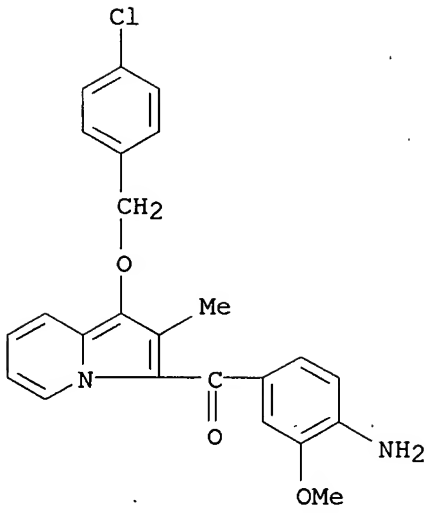
RN 610766-66-0 CAPLUS
CN Acetic acid, [[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]- (9CI) (CA INDEX NAME)



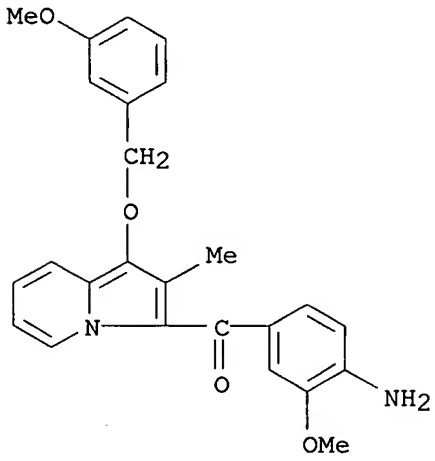
RN 610767-08-3 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)(1-methoxy-2-methyl-3-indolizinyl)- (9CI) (CA INDEX NAME)



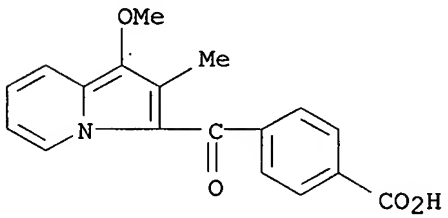
RN 724700-78-1 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(4-chlorophenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



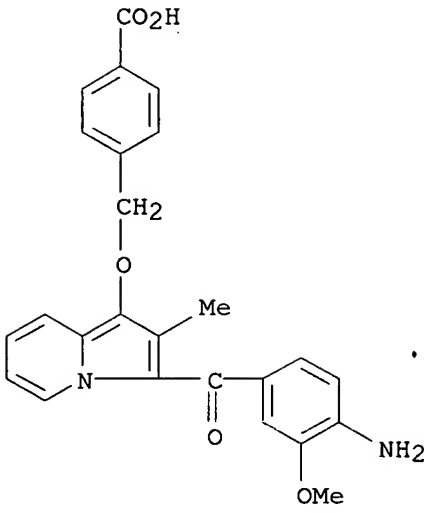

RN 727650-85-3 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(3-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



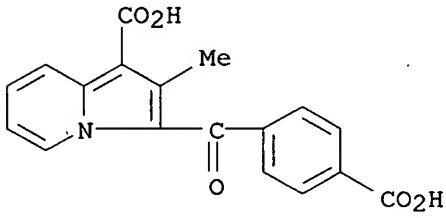

RN 736133-23-6 CAPLUS
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



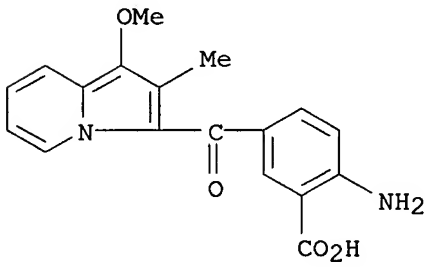

RN 741669-12-5 CAPLUS
CN Benzoic acid, 4-[[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]- (9CI) (CA INDEX NAME)



RN 778573-49-2 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-carboxybenzoyl)-2-methyl- (9CI) (CA INDEX NAME)



RN 848318-25-2 CAPLUS
CN Benzoic acid, 2-amino-5-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, monosodium salt (9CI) (CA INDEX NAME)



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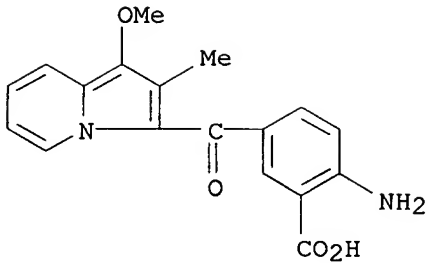
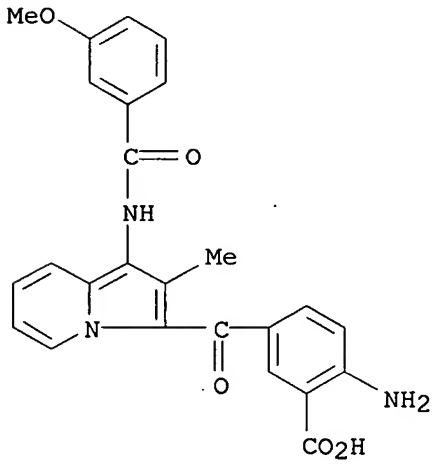
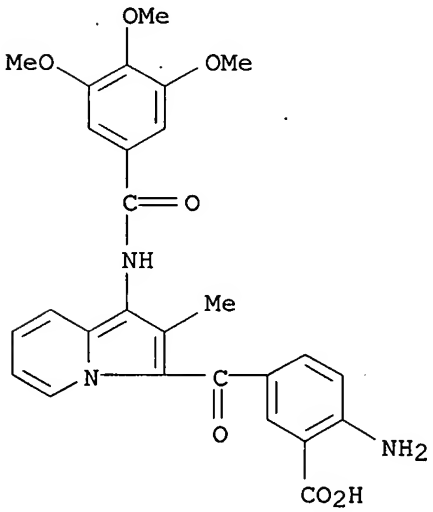
RN 848463-13-8 CAPLUS
CN Benzoic acid, 2-amino-5-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



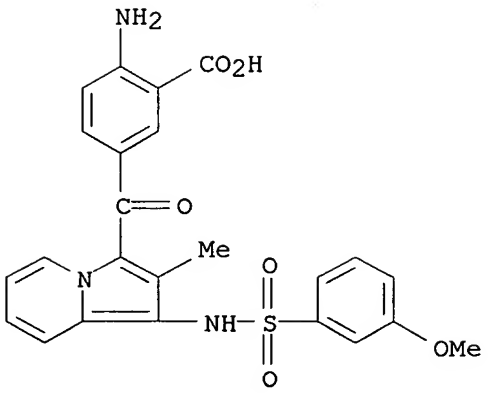

RN 862156-48-7 CAPLUS
CN Benzoic acid, 2-amino-5-[[1-[(3-methoxybenzoyl)amino]-2-methyl-3-indolizinyl]carbonyl]- (9CI) (CA INDEX NAME)




RN 862156-49-8 CAPLUS
CN Benzoic acid, 2-amino-5-[[2-methyl-1-[(3,4,5-trimethoxybenzoyl)amino]-3-indolizinyl]carbonyl]- (9CI) (CA INDEX NAME)




RN 862156-50-1 CAPLUS
CN Benzoic acid, 2-amino-5-[[1-[[(3-methoxyphenyl)sulfonyl]amino]-2-methyl-3-indolizinyl]carbonyl]- (9CI) (CA INDEX NAME)

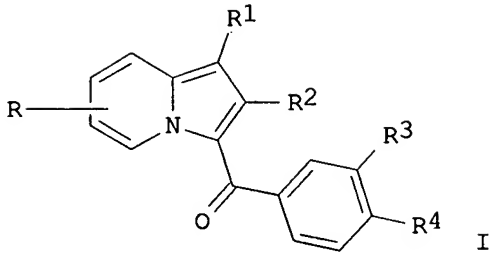



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:258661 CAPLUS
DOCUMENT NUMBER: 142:316694
TITLE: Preparation of 1,2,3-substituted indolizines as selective b-FGF antagonists and angiogenesis inhibitors for treatment of cancer and cardiovascular diseases
INVENTOR(S): Badorc, Alain; Bono, Francoise; Bordes, Marie Francoise; Guillo, Nathalie; Herbert, Jean Marc
PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.
SOURCE: Fr. Demande, 70 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2859997 | A1 | 20050325 | FR 2003-10957 | 20030918 |
| FR 2859997 | B1 | 20060203 | | |
| WO 2005028476 | A1 | 20050331 | WO 2004-FR2347 | 20040916 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1664047 | A1 | 20060607 | EP 2004-787388 | 20040916 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2007505867 | T | 20070315 | JP 2006-526664 | 20040916 |
| US 2006199962 | A1 | 20060907 | US 2006-378972 | 20060317 |
| PRIORITY APPLN. INFO.: | | | FR 2003-10957 A | 20030918 |
| | | | WO 2004-FR2347 W | 20040916 |

OTHER SOURCE(S): MARPAT 142:316694
GI



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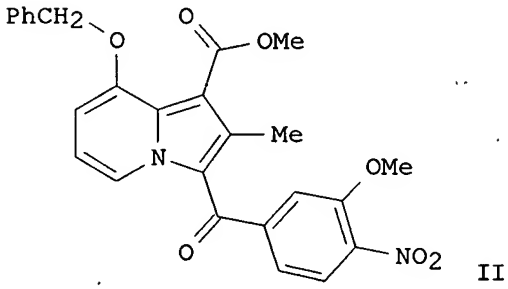


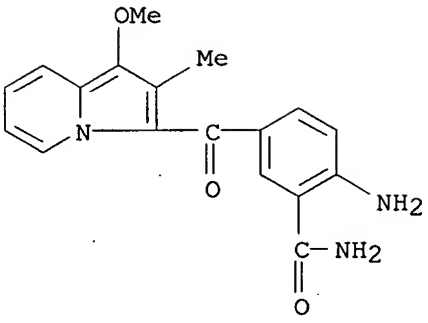
II

AB Title compds. I [wherein R = H, halo, Me, OH and derivs., CO2H, etc.; R1 = alkoxy, CO2H and derivs., (un)substituted Ph; R2 = cyclo/alkyl, (un)substituted Ph; R3, R4 = independently OH and derivs., NH2, CO2H, alkoxycarbonyl, NO2, etc.; and their pharmaceutically acceptable salts] were prepared as selective basic fibroblast growth factor (b-FGF) antagonists and angiogenesis inhibitors. For example, II (m.p. = 125°) was prepared by Chichibabin cyclization of Me 2-[5-(benzyloxy)pyridin-2-yl]acetate with chloroacetone followed by benzoylation with 3-methoxy-4-nitrobenzoyl chloride in DCE at room temperature for 60 h. I inhibited the growth of b-FGF-expressing tumor cell lines (HUVEC) with a specific activity in the range of 10-9 M to 10-5 M. I exhibited a specific activity in the range of 10-11 M to 10-7 M in an angiogenesis test in vitro. I are active by oral administration of doses of 0.1 to 100 mg/kg. Thus, I are useful for treatment of cancer, certain cardiovascular diseases, diabetic retinopathy, chronic inflammations, hypo- and achondroplasia.

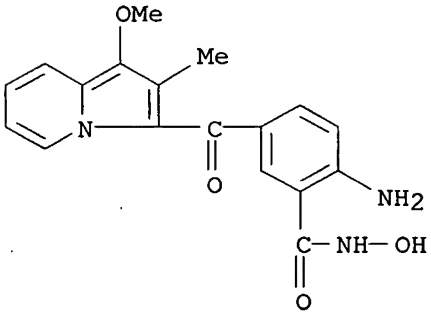
IT 848318-07-0P, 2-Amino-5-[(1-methoxy-2-methylindolizin-3-yl)carbonyl]benzamide 848318-08-1P, 2-Amino-N-hydroxy-5-[(1-methoxy-2-methylindolizin-3-yl)carbonyl]benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(b-FGF inhibitor; preparation of indolizines as selective b-FGF inhibitors)

RN 848318-07-0 CAPLUS

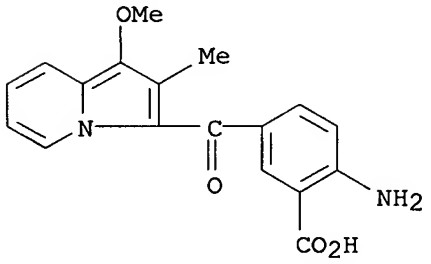
CN Benzamide, 2-amino-5-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 848318-08-1 CAPLUS
CN Benzamide, 2-amino-N-hydroxy-5-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



IT 848318-25-2, Sodium 2-amino-5-[(1-methoxy-2-methylindolizin-3-yl)carbonyl]benzoate
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolizines as selective b-FGF inhibitors)
RN 848318-25-2 CAPLUS
CN Benzoic acid, 2-amino-5-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:534300 CAPLUS
DOCUMENT NUMBER: 141:65094
TITLE: Substituted 1-benzoyl-3-cyano-pyrrolo[1,2-a]quinolines

and analogs as activators of caspases and inducers of apoptosis

INVENTOR(S): Cai, Sui Xiong; Drewe, John A.; Jiang, Sungchun; Kasibhatla, Shailaja; Kuemmerle, Jared Daniel; Sirisoma, Nilantha Sudath; Zhang, Han-Zhong

PATENT ASSIGNEE(S): Cytovia, Inc., USA

SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004055163 | A2 | 20040701 | WO 2003-US39550 | 20031212 |
| WO 2004055163 | A3 | 20040826 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003300883 | A1 | 20040709 | AU 2003-300883 | 20031212 |
| US 2005014759 | A1 | 20050120 | US 2003-733229 | 20031212 |
| US 7135480 | B2 | 20061114 | | |
| EP 1578424 | A2 | 20050928 | EP 2003-813401 | 20031212 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |

PRIORITY APPLN. INFO.:
US 2002-432608P P 20021212
WO 2003-US39550 W 20031212

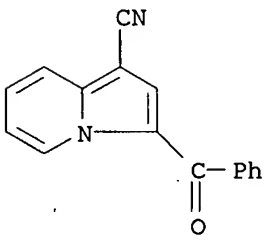
OTHER SOURCE(S): MARPAT 141:65094

AB The invention discloses substituted 1-benzoyl-3-cyanopyrrolo[1,2-a]quinolines and analogs thereof. Compds. of the invention are activators of caspases and inducers of apoptosis. Therefore, the compds. of the invention can be used to induce cell death in a variety of clin. conditions in which uncontrolled growth and spread of abnormal cells occurs. Compound prepn is described.

IT 25627-81-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzoylcyanopyrroloquinolines and analogs as activators of caspases and inducers of apoptosis)

RN 25627-81-0 CAPLUS

CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)

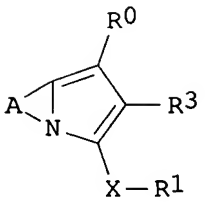


L4 ANSWER 7 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:252511 CAPLUS
DOCUMENT NUMBER: 140:287263
TITLE: Synthesis of 3-acylindolizines via cyclization of 2-methyl-1-phenacylpyridinium halides with sterically hindered reagents, and their use as intermediates in the preparation of 1-glyoxylamide indolizines
INVENTOR(S): Sun, Lijun; Koya, Keizo; Xia, Zhi-qiang; Przewloka, Teresa; Zhang, Shijie; Ono, Mitsunori
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004024727 | A2 | 20040325 | WO 2003-US28252 | 20030910 |
| WO 2004024727 | A3 | 20040603 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2496764 | A1 | 20040325 | CA 2003-2496764 | 20030910 |
| AU 2003267071 | A1 | 20040430 | AU 2003-267071 | 20030910 |
| EP 1537105 | A2 | 20050608 | EP 2003-749545 | 20030910 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1681813 | A | 20051012 | CN 2003-821740 | 20030910 |
| JP 2006504692 | T | 20060209 | JP 2004-536391 | 20030910 |
| US 2004152897 | A1 | 20040805 | US 2003-660358 | 20030911 |
| NO 2005001009 | A | 20050404 | NO 2005-1009 | 20050224 |

PRIORITY APPLN. INFO.: US 2002-410679P P 20020913
WO 2003-US28252 W 20030910

OTHER SOURCE(S): MARPAT 140:287263
GI

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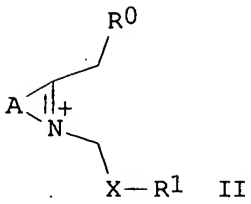
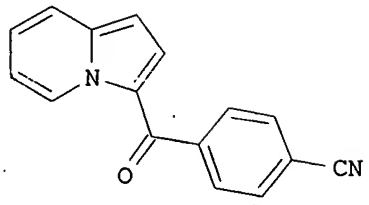



II



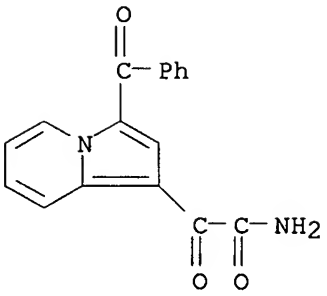

III

AB The invention is related to a method for preparing 3-acylindolizines I by reacting a substrate II with either the cyclization reagent R3C(OR2)2N(R4)2 or, a reagent prepared by reaction of R3C(:O)N(R4)2 with an alkylating agent [A = (un)substituted aryl; X = covalent bond, or C(:O), S(:O), SO2, NH and derivs., (un)substituted methylene; R0 = H, halo, CN, CO2H and derivs., C(:O)H and derivs., CONH2 and derivs., SO2H and derivs., SO2NH2 and derivs., (un)substituted aliphatic, aryl, non-aromatic heterocyclyl; R1 = H, CN, OH and derivs., SH and derivs., NH2 and derivs., (un)substituted aliphatic, aryl, non-aromatic heterocyclyl; R2 = independently (un)substituted aliphatic, aryl, or both R2 = linking group; R3 = H, (un)substituted aryl; or an electron-withdrawing, or electron-donating group provided that if R3 = H, at least one R2 = secondary or tertiary alkyl, (un)substituted aryl; R4 = independently H, (un)substituted aliphatic, aryl; or R4NR4 = (un)substituted heterocyclyl]. The advantages include high yields in the 3-acylindolizine, absence of 2-acylindolizine byproduct, and an environmental-friendly process. The invention is also directed to the use of I in the preparation of pharmacol. active 1-glyoxylamide indolizines III by further acylation of I with oxalyl chloride or a synthetic equivalent, and reaction with amines [B = (un)substituted ring or fused to an aryl group; R5, R6 = independently H, (un)substituted aliphatic, non-aromatic heterocyclyl, aryl, provided that R5 or R6 are not both H, or NR5R6 = (un)substituted non-aromatic heterocyclyl, aryl; R1, R2, X defined as above]. For example, 4-[(Indolizin-3-yl)carbonyl]benzonitrile was prepared by cyclization of IV•Br- with N,N-dimethylformamide di-tert-butylacetal in DMF.

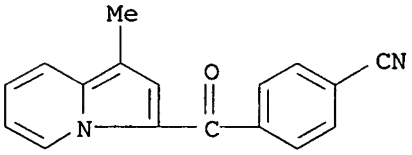
IT 675139-41-0DP, derivs.
RL: PNU (Preparation, unclassified); PREP (Preparation)
(1-glyoxylamide indolizine; synthesis of indolizines via cyclization of 2-methyl-1-phenacylpyridinium halides with amidoacetals)

RN 675139-41-0 CAPLUS

CN 1-Indolizineacetamide, 3-benzoyl-α-oxo- (9CI) (CA INDEX NAME)



IT 675139-24-9P, 4-[(1-Methylindolizin-3-yl)carbonyl]benzonitrile
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(indolizine product; synthesis of indolizines via cyclization of 2-methyl-1-phenacylpyridinium halides with amidoacetals)
RN 675139-24-9 CAPLUS
CN Benzonitrile, 4-[(1-methyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:164572 CAPLUS
DOCUMENT NUMBER: 140:374815
TITLE: Reaction Modes and Mechanism in Indolizine Photooxygenation Reactions
AUTHOR(S): Li, Yun; Hu, Hua-You; Ye, Jian-Ping; Fun, Hoong-Kun; Hu, Hong-Wen; Xu, Jian-Hua
CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210093, Peop. Rep. China
SOURCE: Journal of Organic Chemistry (2004), 69(7), 2332-2339
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:374815

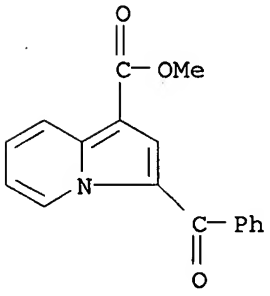
AB Photooxygenations of 1,2-, 1,3-, and 2,3-di- and 1,2,3-trisubstituted indolizines under different reaction conditions in methanol and acetonitrile have been investigated to establish the general reaction pattern and mechanism in indolizine photooxygenation in view of the influence of the ring substituents and substitution pattern. Photooxygenations of 1-acyl-2-phenylindolizines and 1,3-dibenzoyl-2-phenylindolizine are self-sensitized, while those of 1-(p-nitrobenzoyl)-2-phenylindolizine and 2-phenyl-3-(p-chlorobenzoyl)indolizine need to be sensitized by rose bengal (RB) or methylene blue (MB). These reactions proceed via a singlet oxygen mechanism yet follow different pathways in methanol and in acetonitrile, with peroxidic zwitterion (in methanol) and dioxetane across the indolizine C2-C3 bond (in acetonitrile) as the intervening intermediates. Methanol trapping of the peroxidic zwitterion results in C3-N bond cleavage and pyrrole ring opening to give the corresponding (E)- and (Z)-3-(2-pyridinyl)-3-benzoylpropenoic acid Me esters and 4-(2-pyridinyl)-3-phenyl-5-aryl-5-hydroxyfuran-2-one as products in methanol, while O-O bond homolysis of the dioxetane furnishes 3-(2-pyridinyl)-3-benzoyl-2-phenyloxirane-2-carboxaldehyde and

1-(6-methyl-2-pyridinyl)-2-phenylethanedione as products in acetonitrile. 3-Benzoyl-1-indolizinecarboxylic acid Me ester is unreactive toward singlet oxygen; however, it could be photooxygenated under electron transfer conditions with 9,10-dicyanoanthracene (DCA) as a sensitizer. This reaction takes place by the combination of the indolizine cation radical with the superoxide anion radical (or mol. oxygen) to give the pyridine ring oxidized Me 3-benzoyl-5-methoxy-8-hydroxy-1-indolizinecarboxylate, di-Me 2-(2-pyridinyl)fumarate, and di-Me 2-(2-pyridinyl)maleate as products.

IT 683774-96-1
RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)
(radical cation intermediate; reaction modes and mechanism in indolizine photooxygenation reactions)

RN 683774-96-1 CAPLUS

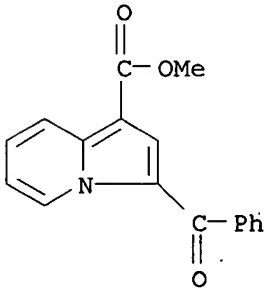
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester, radical ion(1+) (9CI) (CA INDEX NAME)




IT 17281-79-7
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(reaction modes and mechanism in indolizine photooxygenation reactions)

RN 17281-79-7 CAPLUS

CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)




REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:798417 CAPLUS

DOCUMENT NUMBER: 139:307679

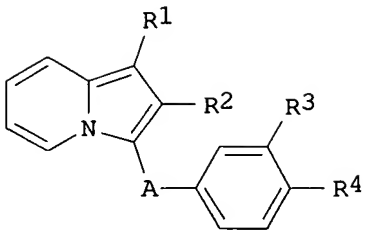
TITLE: Preparation of 1,2,3-substituted indolizines as selective b-FGF antagonists and angiogenesis inhibitors for treatment of cancer and cardiovascular diseases

INVENTOR(S): Badorc, Alain; Guillo, Nathalie; Bono, Francoise; Herbert, Jean Marc
PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.
SOURCE: Fr. Demande, 71 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

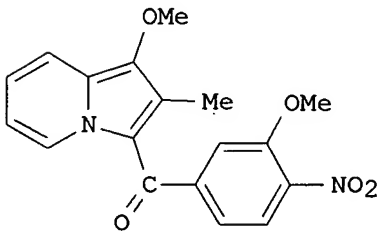
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2838123 | A1 | 20031010 | FR 2002-4220 | 20020404 |
| FR 2838123 | B1 | 20050610 | | |
| CA 2476056 | A1 | 20031016 | CA 2003-2476056 | 20030402 |
| WO 2003084956 | A1 | 20031016 | WO 2003-FR1030 | 20030402 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003240984 | A1 | 20031020 | AU 2003-240984 | 20030402 |
| EP 1495023 | A1 | 20050112 | EP 2003-730302 | 20030402 |
| EP 1495023 | B1 | 20050907 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003009026 | A | 20050209 | BR 2003-9026 | 20030402 |
| CN 1649867 | A | 20050803 | CN 2003-807736 | 20030402 |
| AT 304013 | T | 20050915 | AT 2003-730302 | 20030402 |
| JP 2005532286 | T | 20051027 | JP 2003-582153 | 20030402 |
| ES 2247540 | T3 | 20060301 | ES 2003-3730302 | 20030402 |
| NZ 534786 | A | 20060630 | NZ 2003-534786 | 20030402 |
| IN 2004KN01212 | A | 20060303 | IN 2004-KN1212 | 20040819 |
| NO 2004004156 | A | 20050103 | NO 2004-4156 | 20040930 |
| US 2005203126 | A1 | 20050915 | US 2004-509919 | 20041004 |

PRIORITY APPLN. INFO.: FR 2002-4220 A 20020404
WO 2003-FR1030 W 20030402

OTHER SOURCE(S): MARPAT 139:307679
GI




I



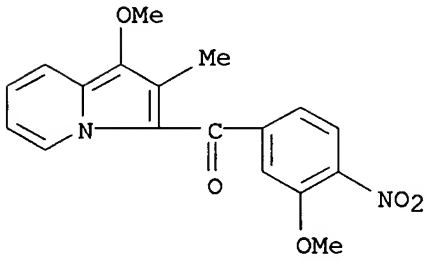

II

AB Title compds. I [wherein R1 = OH, carboxy, alkoxycarbonyl, amino and derivs., (un)substituted alkoxy, aminoalkylcarbonyl, etc.; R2 = alkyl, cycloalkyl, (un)substituted Ph; A = CO, SO or SO2; R3, R4 = identical or different selected from H, alkoxy, amino and derivs., carboxy, alkoxycarbonyl, OH, NO2, hydroxyamino, (un)substituted alkylsulfonylamino, aminoalkoxy, etc.; or R3 and R4 = 5 or 6-membered heterocycle; with the proviso that when R3 = alkoxy, and R4 = (un)sunstituted aminoalkoxy or OH, R1 cannot be alkoxy; and their pharmaceutical acceptable salts] were prepared as selective basic fibroblast growth factor (b-FGF) antagonists and angiogenesis inhibitors. For example, II was prepared by Chichibabin cyclization of 2-(methoxymethyl)pyridine with chloroacetone, followed by benzoylation of the 1-methoxy-2-methylindolizine intermediate with 3-methoxy-4-nitrobenzoyl chloride in DCE at room temperature for 4 h. I inhibited the growth of b-FGF-expressing tumor cell lines (HUVEC) with a specific activity in the range of 10-9 M to 10-5 M. I exhibited a specific activity in the range of 10-11 M to 10-7 M in an angiogenesis test in vitro. I are active by oral administration of doses of 0.1 to 100 mg/kg. Thus, I are useful for treatment of cancer, certain cardiovascular diseases, diabetic retinopathy, chronic inflammations, hypo- and achondroplasia.

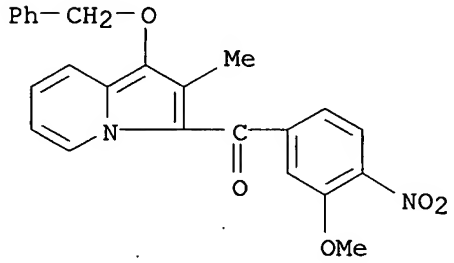
IT 610765-77-0P, (1-Methoxy-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610765-79-2P, (1-Benzyloxy-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610765-84-9P, (1-Methoxy-2-methyl-indolizin-3-yl)(4-methoxycarbonylphenyl)methanone 610765-89-4P, (1-Ethoxycarbonyl-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610765-95-2P, (1-Amino-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610765-97-4P, (3-Methoxy-4-nitrophenyl)[2-methyl-1-(methylamino)-indolizin-3-yl]methanone 610765-99-6P, (1-Hydroxy-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610766-01-3P, [1-(2-Chloro-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-11-5P, [1-(2-Acetyloxyethoxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-16-0P, Methyl 4-[(1-hydroxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-19-3P, 3-(3-Methoxy-4-nitrobenzoyl)-2-methyl-1-carboxyindolizine 610766-24-0P, (4-Amino-3-methoxyphenyl)(1-methoxy-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-27-3P, (4-Amino-3-methoxyphenyl)(1-ethoxycarbonyl-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-65-9P,

3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-indolizine carboxylic acid 610766-77-3P, Ethyl 2-[2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetate 610766-81-9P, 3-(Dibutylamino)-N-[2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]propanamide hydrochloride 610766-85-3P, Ethyl 2-[[3-(dibutylamino)propanoyl]-2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetate hydrochloride 610766-89-7P, N-[2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]-2-(dibutylamino)-1-ethanesulfonamide hydrochloride 610766-92-2P, 3-[3-Methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl-1-(ethoxycarbonyl)indolizine 610767-04-9P, (4-Amino-3-methoxyphenyl)[1-[(2-chlorobenzyl)oxy]-2-methyl-indolizin-3-yl]methanone 610767-08-3P, (4-Amino-3-methoxyphenyl)(1-methoxy-2-methyl-indolizin-3-yl)methanone 610767-11-8P, 2-[[[2-(Dibutylamino)ethyl]sulfonyl]-2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetic acid 610767-12-9P, N-[2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]-2-(dibutylamino)-1-ethanesulfonamide 610767-13-0P, 3-[3-Methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl-1-carboxyindolizine
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(b-FGF inhibitor; preparation of indolizines as selective b-FGF inhibitors)

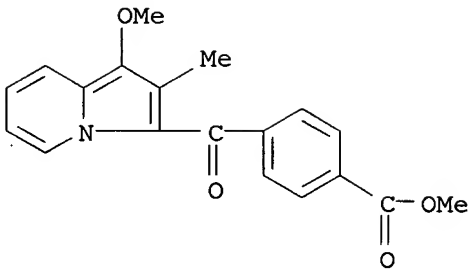
RN 610765-77-0 CAPLUS
CN Methanone, (1-methoxy-2-methyl-3-indolizinyl)(3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



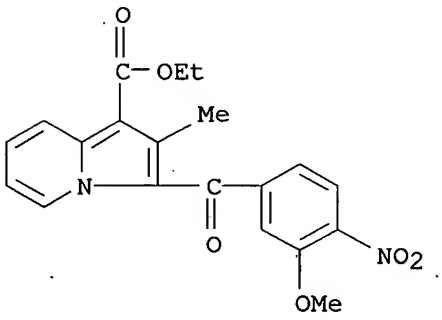

RN 610765-79-2 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[2-methyl-1-(phenylmethoxy)-3-indolizinyl]- (9CI) (CA INDEX NAME)



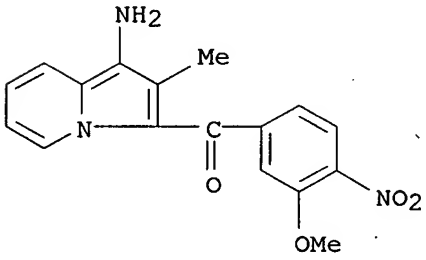

RN 610765-84-9 CAPLUS
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



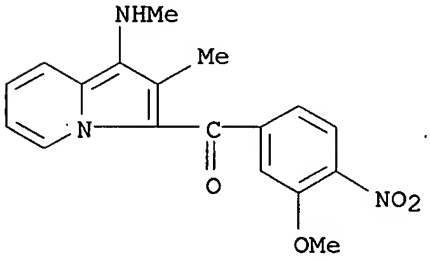
RN 610765-89-4 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(3-methoxy-4-nitrobenzoyl)-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 610765-95-2 CAPLUS
CN Methanone, (1-amino-2-methyl-3-indolizinyl)(3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)

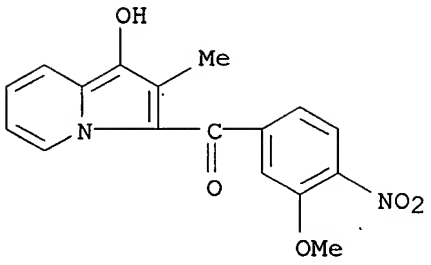


RN 610765-97-4 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[2-methyl-1-(methylamino)-3-indolizinyl]- (9CI) (CA INDEX NAME)

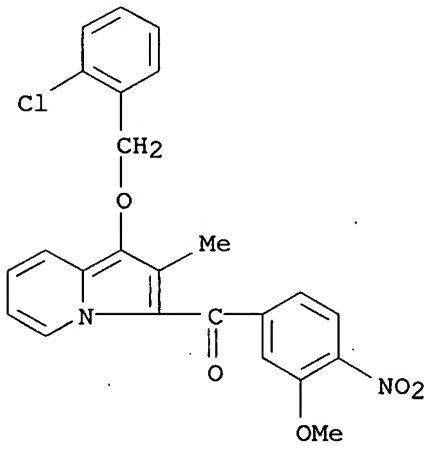


RN 610765-99-6 CAPLUS

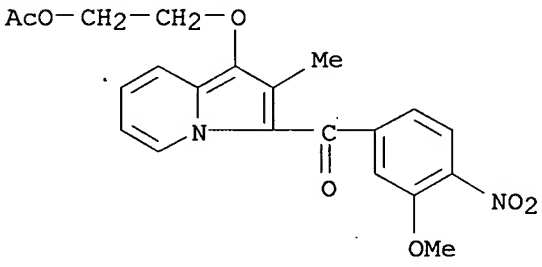
CN Methanone, (1-hydroxy-2-methyl-3-indolizinyl)(3-methoxy-4-nitrophenyl)-
(9CI) (CA INDEX NAME)



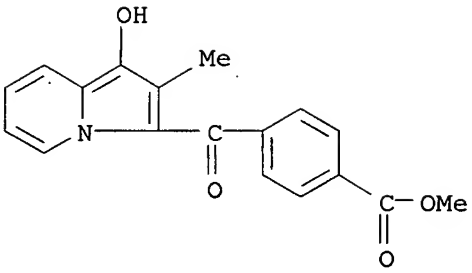

RN 610766-01-3 CAPLUS
CN Methanone, [1-[(2-chlorophenyl)methoxy]-2-methyl-3-indolizinyl](3-methoxy-
4-nitrophenyl)- (9CI) (CA INDEX NAME)



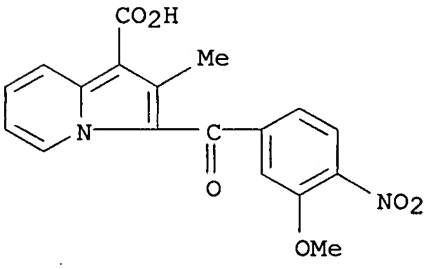

RN 610766-11-5 CAPLUS
CN Methanone, [1-[2-(acetyloxy)ethoxy]-2-methyl-3-indolizinyl](3-methoxy-4-
nitrophenyl)- (9CI) (CA INDEX NAME)



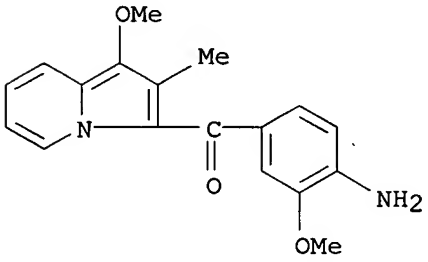

RN 610766-16-0 CAPLUS
CN Benzoic acid, 4-[(1-hydroxy-2-methyl-3-indolizinyl)carbonyl]-, methyl
ester (9CI) (CA INDEX NAME)



RN 610766-19-3 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(3-methoxy-4-nitrobenzoyl)-2-methyl- (9CI) (CA INDEX NAME)

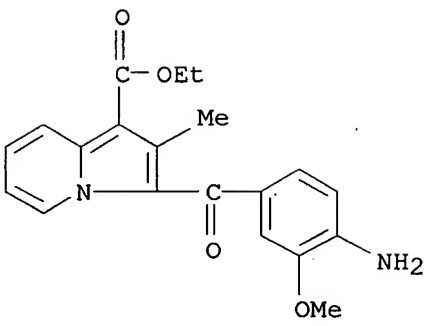


RN 610766-24-0 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)(1-methoxy-2-methyl-3-indolizinyl)-, hydrochloride (9CI) (CA INDEX NAME)



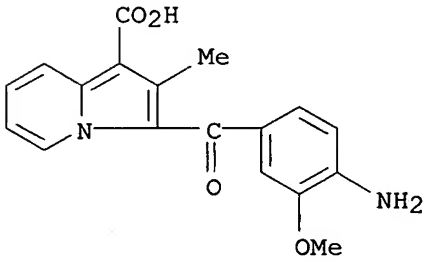
●x HCl

RN 610766-27-3 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl-, ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

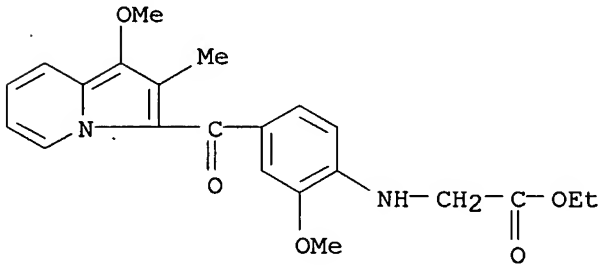


●x HCl

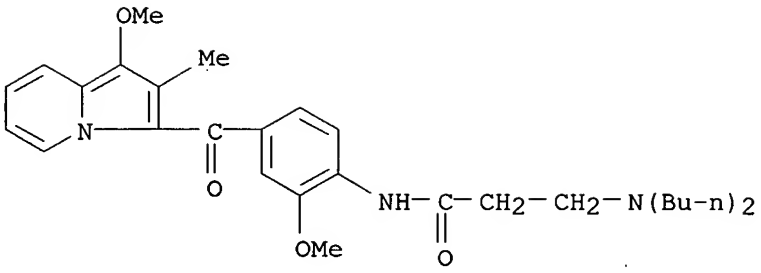
RN 610766-65-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl- (9CI) (CA INDEX NAME)



RN 610766-77-3 CAPLUS
CN Glycine, N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

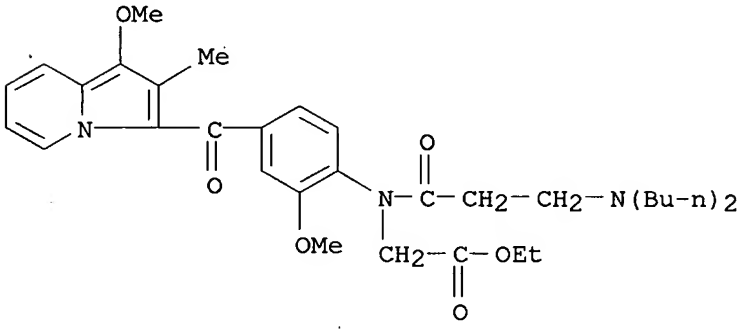


RN 610766-81-9 CAPLUS
CN Propanamide, 3-(dibutylamino)-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



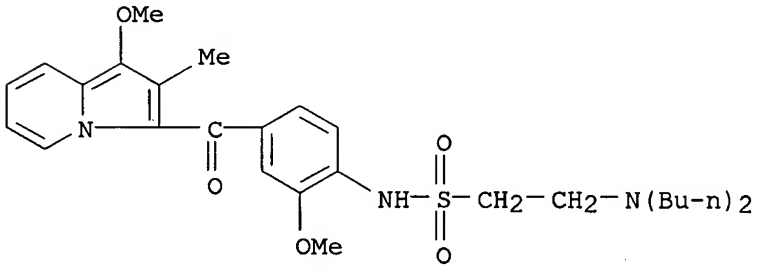
● HCl

RN 610766-85-3 CAPLUS
CN Glycine, N,N-dibutyl-β-alanyl-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



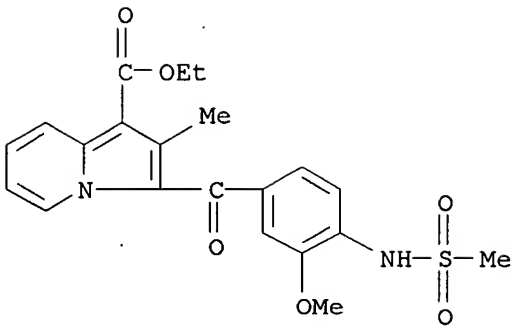
● HCl

RN 610766-89-7 CAPLUS
CN Ethanesulfonamide, 2-(dibutylamino)-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

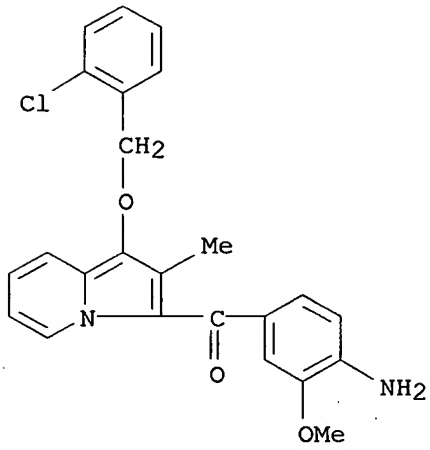


●x HCl

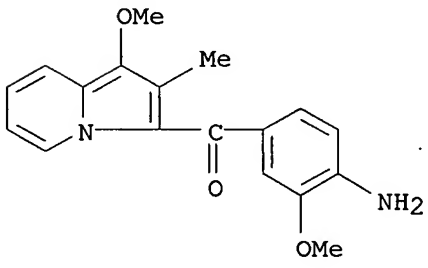
RN 610766-92-2 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-[3-methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



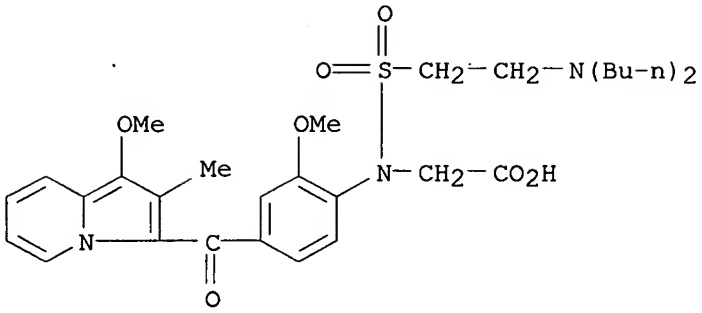
RN 610767-04-9 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(2-chlorophenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



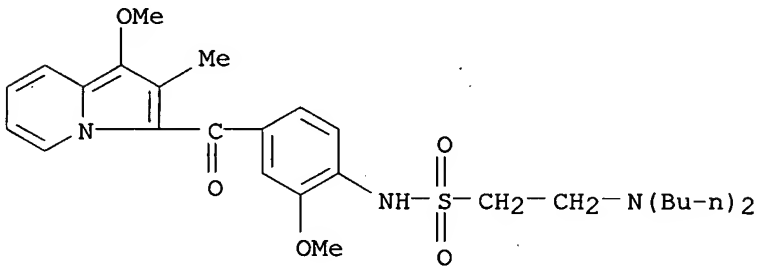
RN 610767-08-3 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)(1-methoxy-2-methyl-3-indolizinyl)- (9CI) (CA INDEX NAME)



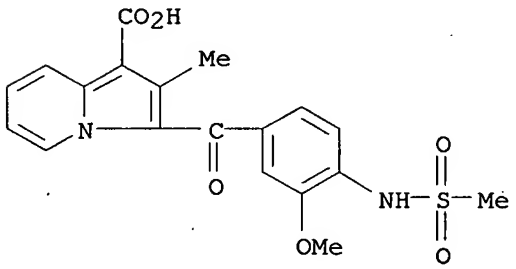
RN 610767-11-8 CAPLUS
CN Glycine, N-[[2-(dibutylamino)ethyl]sulfonyl]-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 610767-12-9 CAPLUS
CN Ethanesulfonamide, 2-(dibutylamino)-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 610767-13-0 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-[3-methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl- (9CI) (CA INDEX NAME)



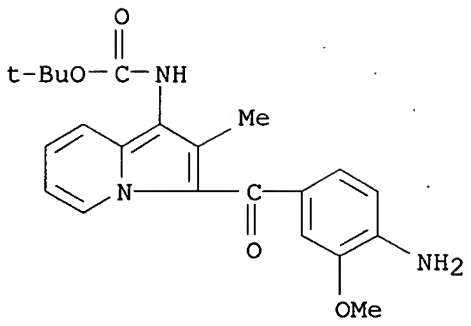
IT 610323-42-7P, (4-Amino-3-methoxyphenyl)-(1-t-butoxycarbonylamino-2-methyl-indolizin-3-yl)methanone 610765-80-5P, (1-Benzyloxy-2-methyl-indolizin-3-yl)(4-methoxycarbonylphenyl)methanone 610765-83-8P, (1-Methoxy-2-methyl-indolizin-3-yl)(4-nitrophenyl)methanone 610765-85-0P, (1-Methoxy-2-methyl-indolizin-3-yl)(3-methoxycarbonylphenyl)methanone 610765-86-1P, (1-Methoxy-2-methyl-indolizin-3-yl)(3-nitro-4-methoxycarbonylphenyl)methanone 610765-87-2P, (1-Methoxy-2-methyl-indolizin-3-yl)(3-methoxy-4-methoxycarbonylphenyl)methanone 610765-88-3P, (1-Methoxy-2-methyl-indolizin-3-yl)(4-methoxycarbonylmethylphenyl)methanone 610765-90-7P, (1-Ethoxycarbonyl-2-methyl-indolizin-3-yl)(3-methoxy-4-methoxycarbonylphenyl)methanone 610765-92-9P, (1-Ethoxycarbonyl-2-methyl-indolizin-3-yl)(4-methoxycarbonylphenyl)methanone 610765-93-0P, [1-[(Methyl)(benzyl)amino]-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610765-94-1P, (1-t-Butoxycarbonylamino-2-methyl-indolizin-3-yl)(3-methoxy-4-

nitrophenyl)methanone 610765-96-3P, N-[3-(3-Methoxy-4-nitrobenzoyl)-2-methyl-indolizin-1-yl]methanesulfonamide 610765-98-5P, [1-(Dimethylamino)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-02-4P, [1-(3-Chloro-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-03-5P, [1-(4-Chloro-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-04-6P, [1-(2-Methoxy-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-05-7P, [1-(3-Methoxy-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-06-8P, [1-(4-Methoxy-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-07-9P, [1-(3-Methoxycarbonyl-benzyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-08-0P, [1-(Ethoxycarbonylmethyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-09-1P, [1-(Aminocarbonylmethyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-10-4P, [1-(2-Dimethylaminoethoxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-12-6P, [1-(2-Hydroxyethoxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-13-7P, [1-(Cyanomethyloxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-14-8P, (1-i-Propoxy-2-methyl-indolizin-3-yl)(3-methoxy-4-nitrophenyl)methanone 610766-15-9P, [1-(Cyclopropylmethoxy)-2-methyl-indolizin-3-yl](3-methoxy-4-nitrophenyl)methanone 610766-17-1P, Methyl 4-[[1-(2-ethoxy-2-oxoethoxy)-2-methyl-indolizin-3-yl]carbonyl]benzoate 610766-18-2P, Methyl 4-[[1-(3-methoxybenzyloxy)-2-methyl-indolizin-3-yl]carbonyl]benzoate 610766-20-6P, N-Ethyl 3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinecarboxamide 610766-21-7P, Ethyl 2-[[[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-indolizin-1-yl]carbonyl]amino]acetate 610766-28-4P, (4-Amino-3-methoxyphenyl)(1-(ethoxycarbonylmethoxy)-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-29-5P, (4-Amino-3-methoxyphenyl)(1-(2-aminocarbonylmethyloxy)-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-30-8P, (4-Amino-3-methoxyphenyl)(1-(2-hydroxyethoxy)-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-31-9P, (4-Aminophenyl)(1-methoxy-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-32-0P, (3-Methoxy-4-aminophenyl)(1-ethylaminocarbonyl-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-33-1P, (4-Amino-3-methoxyphenyl)[1-[(2-chlorobenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-35-3P, (4-Amino-3-methoxyphenyl)(1-[2-(dimethylamino)ethoxy]-2-methyl-indolizin-3-yl)methanone hydrochloride 610766-36-4P, (4-Amino-3-methoxyphenyl)[1-[(4-chlorobenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-37-5P, (4-Amino-3-methoxyphenyl)[1-[(3-methoxybenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-38-6P, (4-Amino-3-methoxyphenyl)[1-[(4-methoxybenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-40-0P, (4-Amino-3-methoxyphenyl)[1-[(2-methoxybenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-42-2P, (4-Amino-3-methoxyphenyl)[1-[(3-methoxycarbonylbenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-43-3P, (4-Amino-3-methoxyphenyl)[1-[(4-methoxycarbonylbenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-44-4P, (4-Amino-3-methoxyphenyl)[1-[(3-chlorobenzyl)oxy]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-45-5P, (4-Amino-3-methoxyphenyl)-[1-[(methyl)(benzyl)amino]-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-46-6P, (4-Amino-3-methoxyphenyl)-[2-methyl-1-(methylamino)-indolizin-3-yl]methanone hydrochloride 610766-47-7P, (4-Amino-3-methoxyphenyl)-[2-methyl-1-(methylsulfonylamino)-indolizin-3-yl]methanone hydrochloride 610766-48-8P, [3-Amino-4-(methoxycarbonyl)phenyl](1-methoxy-2-methyl-indolizin-3-yl)methanone 610766-51-3P,

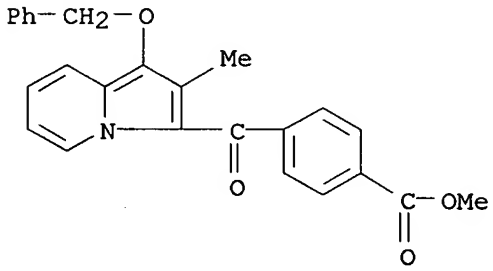
(4-Amino-3-methoxyphenyl)[1-(cyclopropylmethoxy)-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-52-4P, (4-Amino-3-methoxyphenyl)[1-(isobutoxy)-2-methyl-indolizin-3-yl]methanone hydrochloride 610766-54-6P, (4-Amino-3-methoxyphenyl)[1-(dimethylamino)-2-methyl-indolizin-3-yl]methanone dihydrochloride 610766-56-8P, Sodium 4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-57-9P, Sodium 3-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-59-1P, Sodium 2-nitro-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-61-5P, Sodium 2-amino-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-62-6P, Sodium 4-[[1-[(3-methoxybenzyl)oxy]-2-methyl-indolizin-3-yl]carbonyl]benzoate 610766-63-7P, Sodium 2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]benzoate 610766-64-8P 610766-66-0P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-carboxymethoxyindolizine 610766-67-1P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-[[(carboxymethyl)amino]carbonyl]indolizine sodium salt 610766-68-2P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-(3-carboxybenzyloxy)indolizine sodium salt 610766-69-3P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-(4-carboxybenzyloxy)indolizine sodium salt 610766-71-7P, 3-(4-Carboxybenzoyl)-2-methyl-1-carboxyindolizine disodium salt 610766-72-8P, 3-(4-Carboxybenzoyl)-2-methyl-1-(carboxymethoxy)-indolizine disodium salt 610766-73-9P, 3-(3-Methoxy-4-carboxybenzoyl)-2-methyl-1-carboxyindolizine disodium salt 610766-74-0P, (1-Methoxy-2-methyl-indolizin-3-yl)[4-[[3-(dibutylamino)propyl]amino]-3-methoxyphenyl]methanone hydrochloride 610766-75-1P, (1-Methoxy-2-methyl-indolizin-3-yl)[3-methoxy-4-(methylamino)phenyl]methanone hydrochloride 610766-78-4P, 2-[2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetic acid 610766-83-1P, N-[2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]acetamide 610766-84-2P, Ethyl [2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]carbamate 610766-86-4P, 2-[[3-(Dibutylamino)propanoyl]-2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetic acid hydrochloride 610766-91-1P, N-[2-Methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]phenyl]methanesulfonamide 610766-93-3P, 3-[3-Methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl-1-carboxyindolizine sodium salt 610766-94-4P, 2-[[[2-(Dibutylamino)ethyl]sulfonyl]-2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetic acid hydrochloride 610767-02-7DP, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-[[(carboxymethyl)amino]carbonyl]indolizine hydrochloride, ester 610767-05-0P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-carboxyindolizine sodium salt 610767-06-1P, 3-(4-Amino-3-methoxybenzoyl)-2-methyl-1-carboxyindolizine hydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(b-FGF inhibitor; preparation of indolizines as selective b-FGF inhibitors)

RN 610323-42-7 CAPLUS

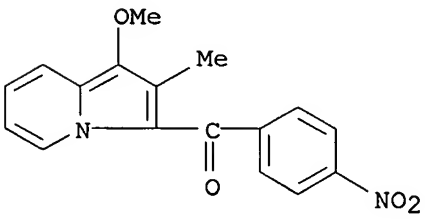
CN Carbamic acid, [3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



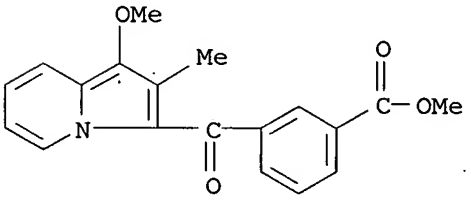
RN 610765-80-5 CAPLUS
CN Benzoic acid, 4-[[2-methyl-1-(phenylmethoxy)-3-indolizinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



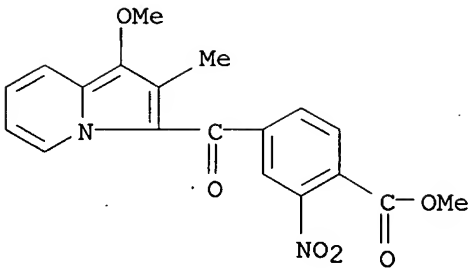
RN 610765-83-8 CAPLUS
CN Methanone, (1-methoxy-2-methyl-3-indolizinyl)(4-nitrophenyl)- (9CI) (CA INDEX NAME)



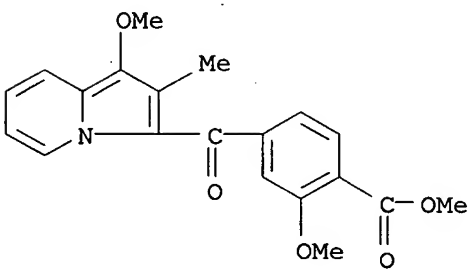
RN 610765-85-0 CAPLUS
CN Benzoic acid, 3-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



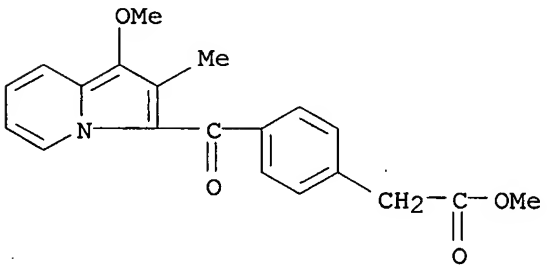
RN 610765-86-1 CAPLUS
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-2-nitro-, methyl ester (9CI) (CA INDEX NAME)



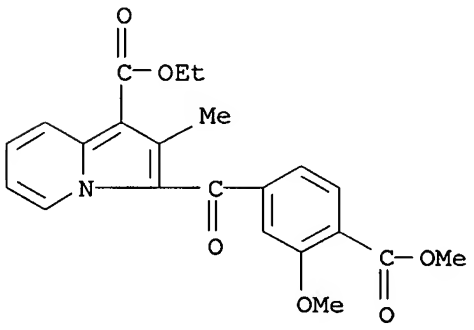
RN 610765-87-2 CAPLUS
CN Benzoic acid, 2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 610765-88-3 CAPLUS
CN Benzeneacetic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

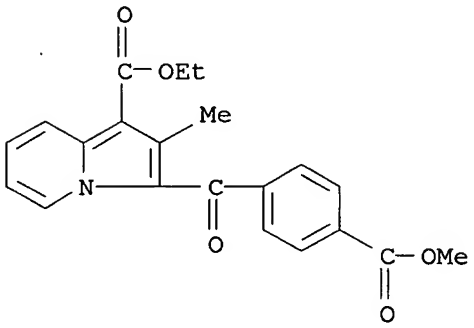


RN 610765-90-7 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-[3-methoxy-4-(methoxycarbonyl)benzoyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

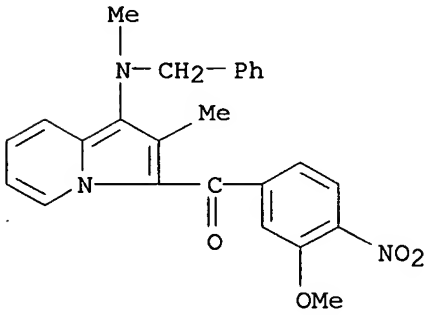


RN 610765-92-9 CAPLUS

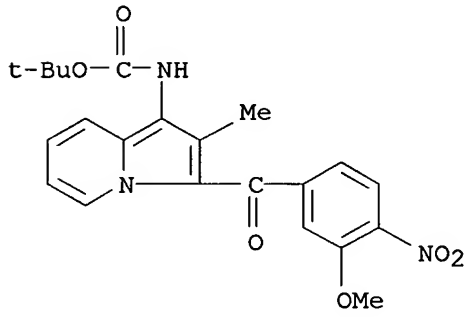
CN 1-Indolizinecarboxylic acid, 3-[4-(methoxycarbonyl)benzoyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



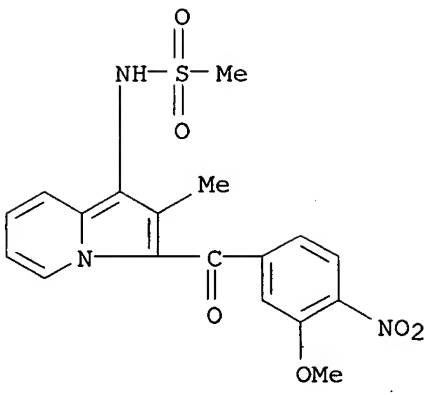
RN 610765-93-0 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[2-methyl-1-[methyl(phenylmethyl)amino]-3-indolizinyl]- (9CI) (CA INDEX NAME)



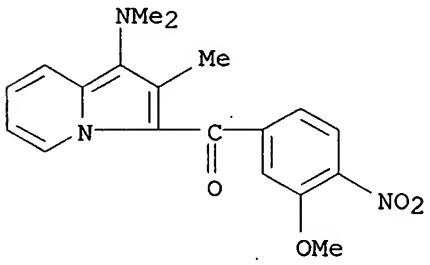
RN 610765-94-1 CAPLUS
CN Carbamic acid, [3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



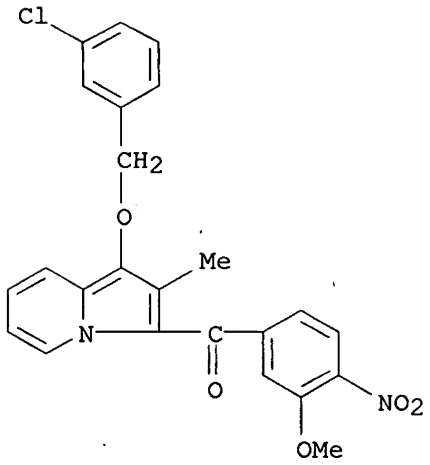
RN 610765-96-3 CAPLUS
CN Methanesulfonamide, N-[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]- (9CI) (CA INDEX NAME)



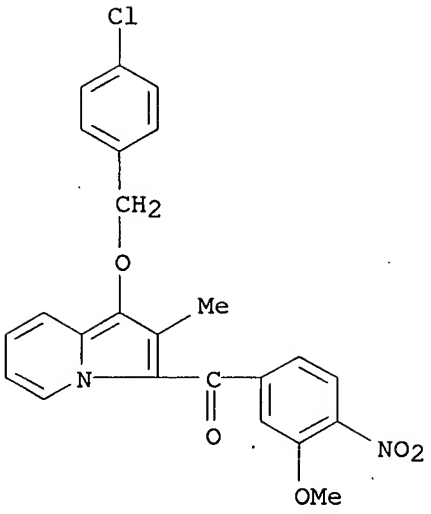
RN 610765-98-5 CAPLUS
CN Methanone, [1-(dimethylamino)-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



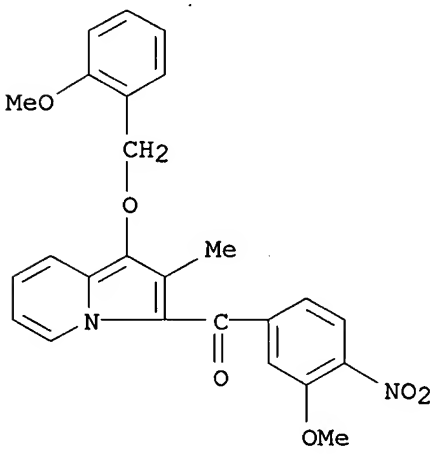
RN 610766-02-4 CAPLUS
CN Methanone, [1-[(3-chlorophenyl)methoxy]-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



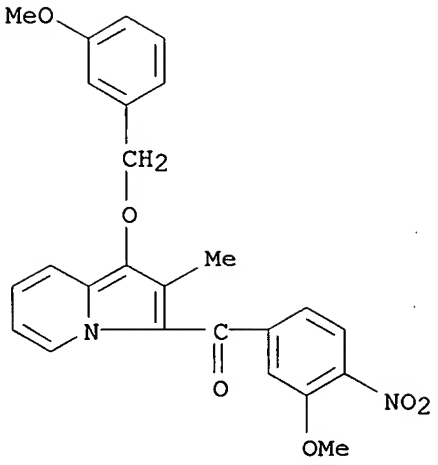
RN 610766-03-5 CAPLUS
CN Methanone, [1-[(4-chlorophenyl)methoxy]-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



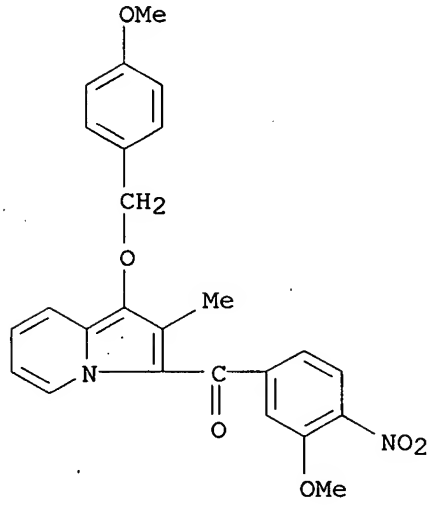

RN 610766-04-6 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[1-[(2-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



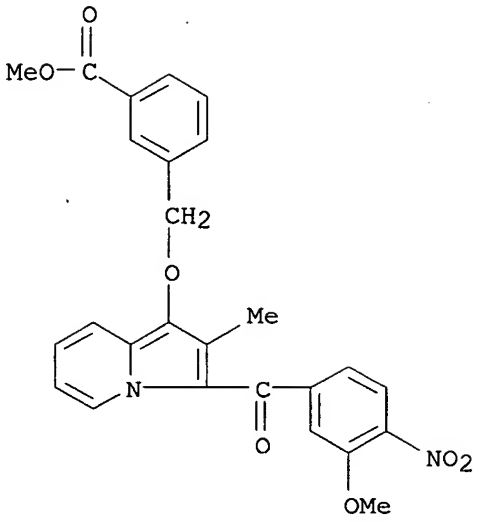

RN 610766-05-7 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[1-[(3-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



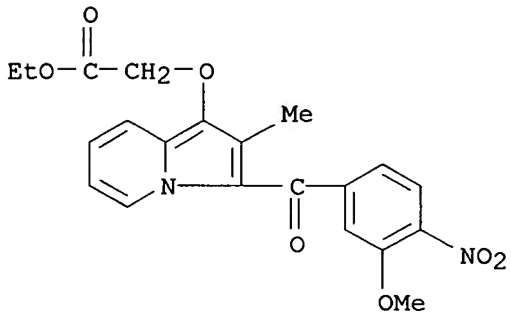

RN 610766-06-8 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[1-[(4-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]- (9CI) (CA INDEX NAME)



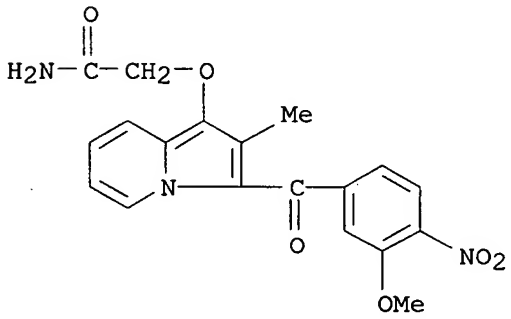

RN 610766-07-9 CAPLUS
CN Benzoic acid, 3-[[[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]-, methyl ester (9CI) (CA INDEX NAME)



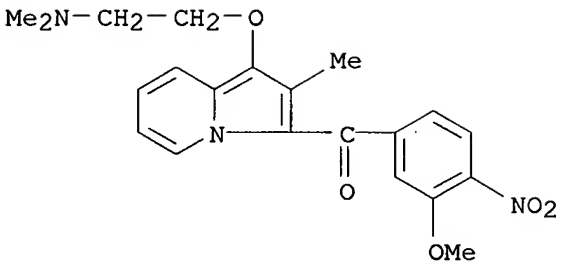
RN 610766-08-0 CAPLUS
CN Acetic acid, [[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)



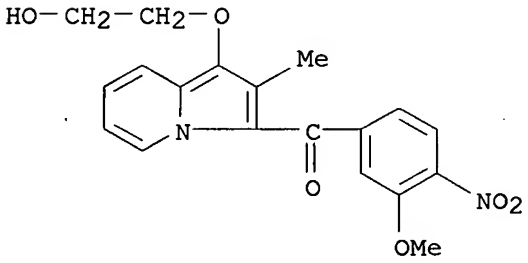
RN 610766-09-1 CAPLUS
CN Acetamide, 2-[[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]oxy]- (9CI) (CA INDEX NAME)



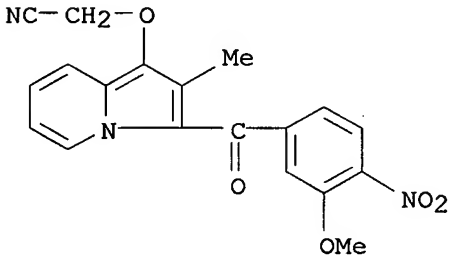
RN 610766-10-4 CAPLUS
CN Methanone, [1-[2-(dimethylamino)ethoxy]-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



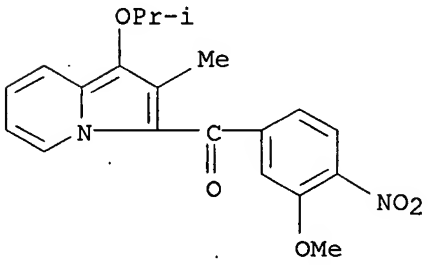
RN 610766-12-6 CAPLUS
CN Methanone, [1-(2-hydroxyethoxy)-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



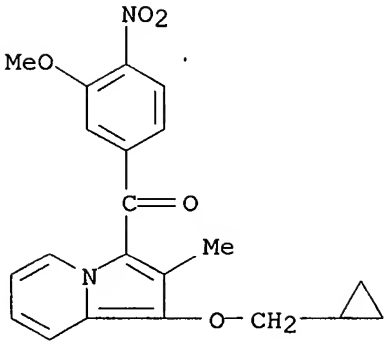
RN 610766-13-7 CAPLUS
CN Acetonitrile, [[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]oxy]- (9CI) (CA INDEX NAME)



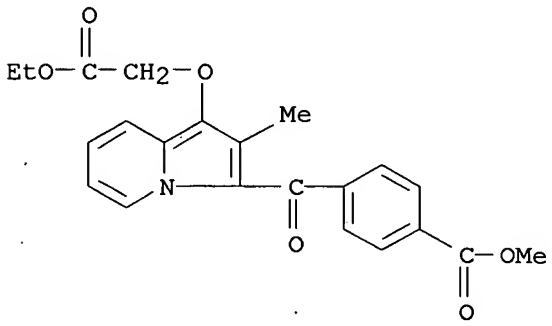
RN 610766-14-8 CAPLUS
CN Methanone, (3-methoxy-4-nitrophenyl)[2-methyl-1-(1-methylethoxy)-3-indolizinyl]- (9CI) (CA INDEX NAME)



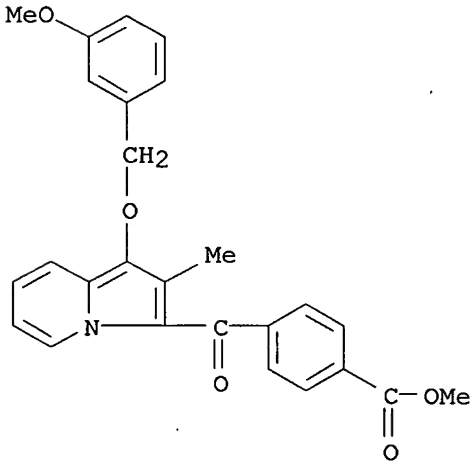
RN 610766-15-9 CAPLUS
CN Methanone, [1-(cyclopropylmethoxy)-2-methyl-3-indolizinyl](3-methoxy-4-nitrophenyl)- (9CI) (CA INDEX NAME)



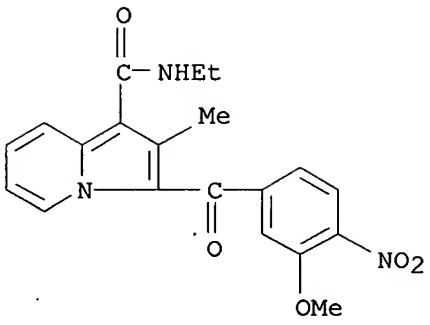
RN 610766-17-1 CAPLUS
CN Benzoic acid, 4-[[1-(2-ethoxy-2-oxoethoxy)-2-methyl-3-indolizinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



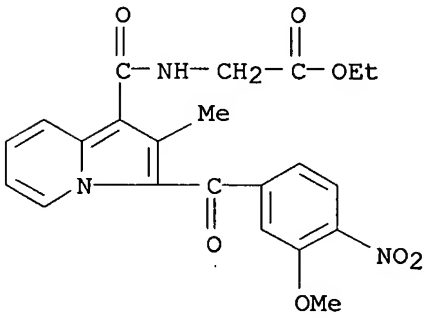
RN 610766-18-2 CAPLUS
CN Benzoic acid, 4-[[1-[(3-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



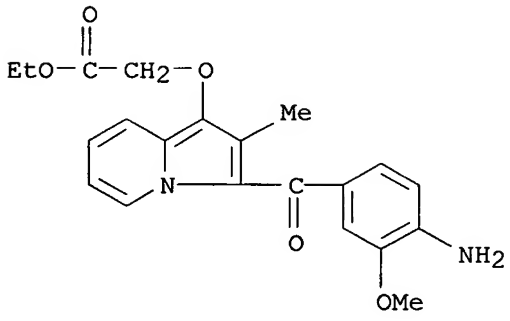
RN 610766-20-6 CAPLUS
CN 1-Indolizinecarboxamide, N-ethyl-3-(3-methoxy-4-nitrobenzoyl)-2-methyl- (9CI) (CA INDEX NAME)



RN 610766-21-7 CAPLUS
CN Glycine, N-[[3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

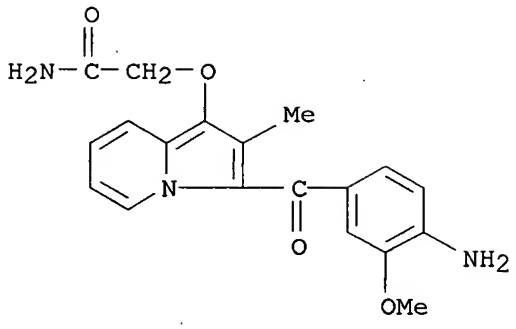


RN 610766-28-4 CAPLUS
CN Acetic acid, [[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]-, ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



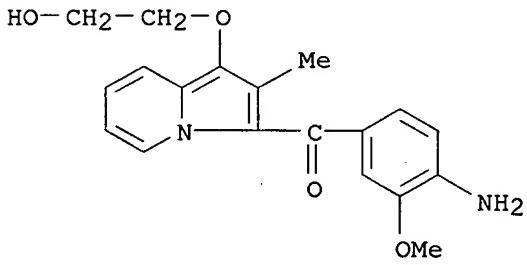
● x HCl

RN 610766-29-5 CAPLUS
CN Acetamide, 2-[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]-, monohydrochloride (9CI) (CA INDEX NAME)



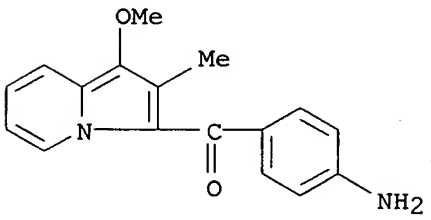
● HCl

RN 610766-30-8 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-(2-hydroxyethoxy)-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



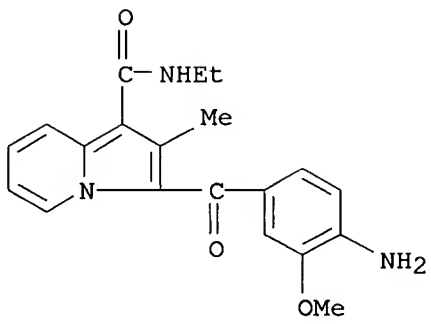
●x HCl

RN 610766-31-9 CAPLUS
CN Methanone, (4-aminophenyl)(1-methoxy-2-methyl-3-indolizinyl)-, hydrochloride (9CI) (CA INDEX NAME)



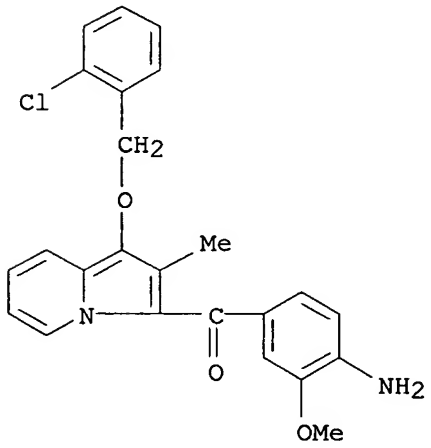
●x HCl

RN 610766-32-0 CAPLUS
CN 1-Indolizinecarboxamide, 3-(4-amino-3-methoxybenzoyl)-N-ethyl-2-methyl-, hydrochloride (9CI) (CA INDEX NAME)



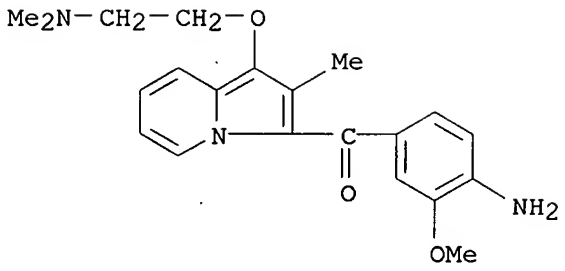
● x HCl

RN 610766-33-1 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(2-chlorophenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



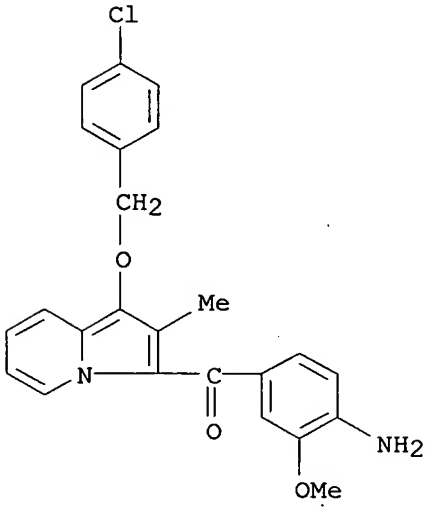
● x HCl

RN 610766-35-3 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[2-(dimethylamino)ethoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



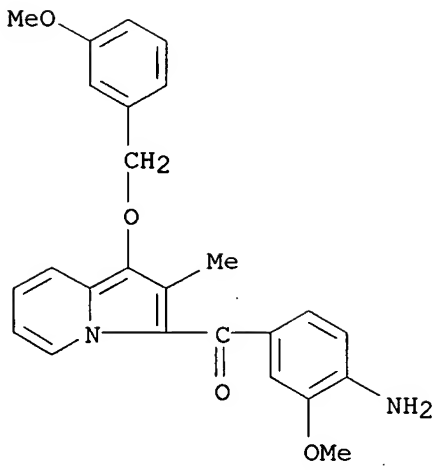

●x HCl

RN 610766-36-4 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(4-chlorophenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



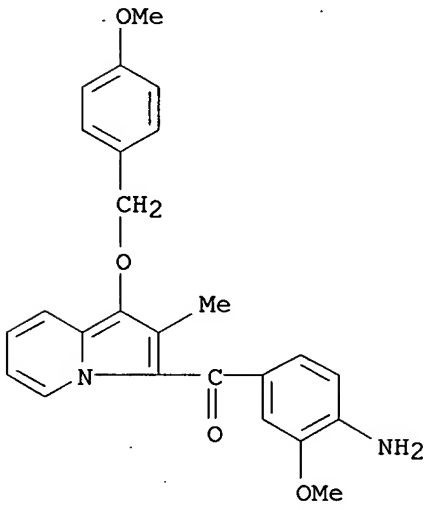

●x HCl

RN 610766-37-5 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(3-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



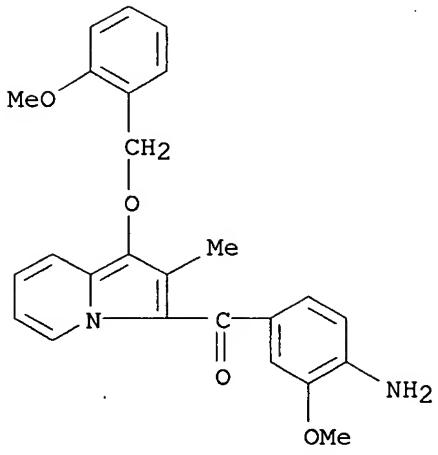

●x HCl

RN 610766-38-6 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(4-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



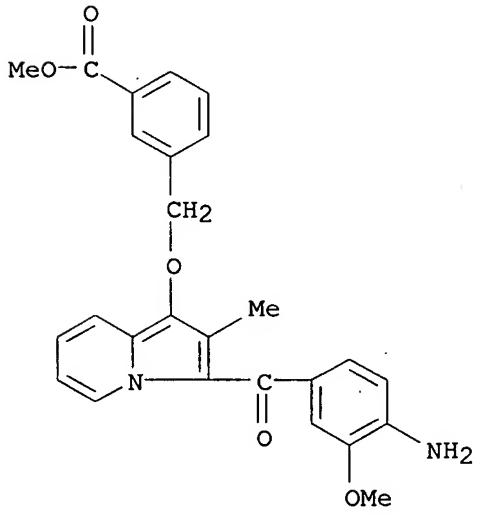

●x HCl

RN 610766-40-0 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(2-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



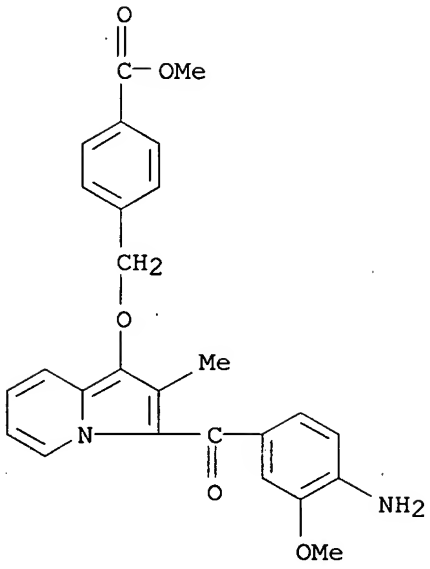
● x HCl

RN 610766-42-2 CAPLUS
CN Benzoic acid, 3-[[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)



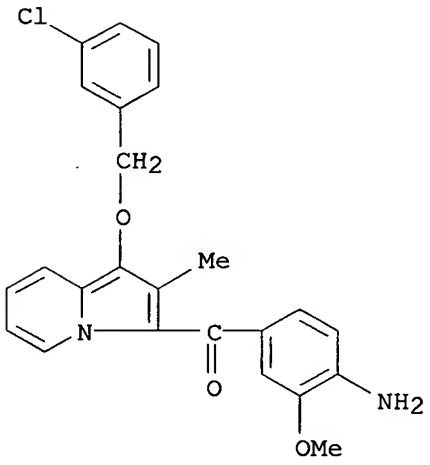
● x HCl

RN 610766-43-3 CAPLUS
CN Benzoic acid, 4-[[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)



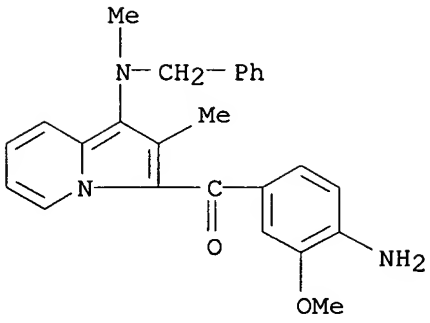
●x HCl

RN 610766-44-4 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-[(3-chlorophenyl)methoxy]-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



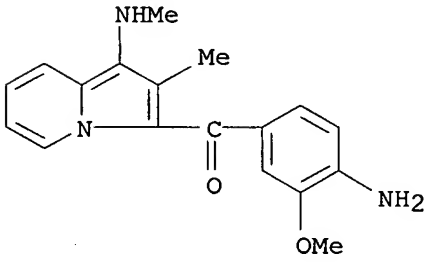
●x HCl

RN 610766-45-5 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[2-methyl-1-[methyl(phenylmethyl)amino]-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



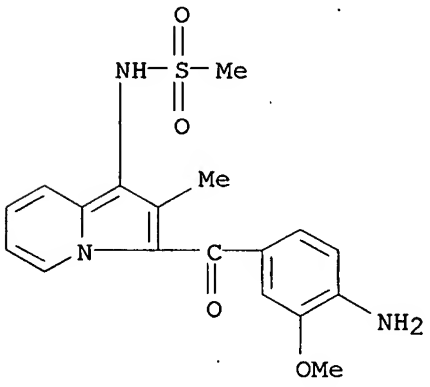
● x HCl

RN 610766-46-6 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[2-methyl-1-(methylamino)-3-indolizinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

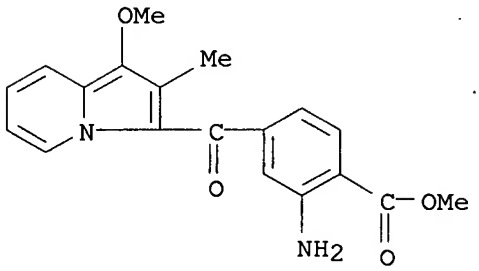
RN 610766-47-7 CAPLUS
CN Methanesulfonamide, N-[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



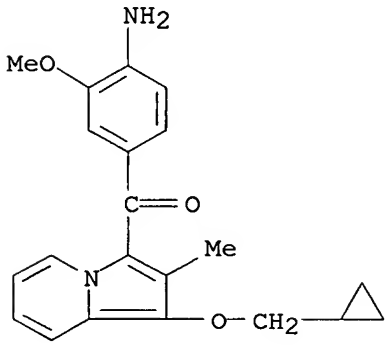
● x HCl

RN 610766-48-8 CAPLUS

CN Benzoic acid, 2-amino-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

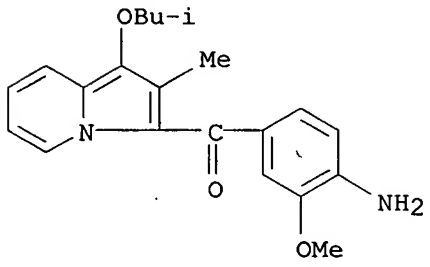



RN 610766-51-3 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-(cyclopropylmethoxy)-2-methyl-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



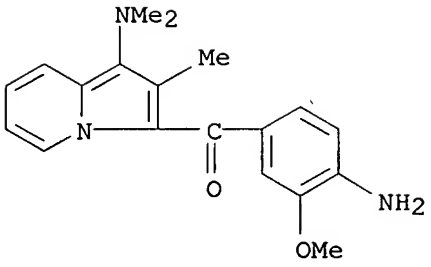

●x HCl

RN 610766-52-4 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[2-methyl-1-(2-methylpropoxy)-3-indolizinyl]-, hydrochloride (9CI) (CA INDEX NAME)



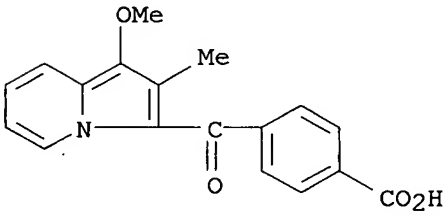

●x HCl

RN 610766-54-6 CAPLUS
CN Methanone, (4-amino-3-methoxyphenyl)[1-(dimethylamino)-2-methyl-3-indolizinyl]-, dihydrochloride (9CI) (CA INDEX NAME)



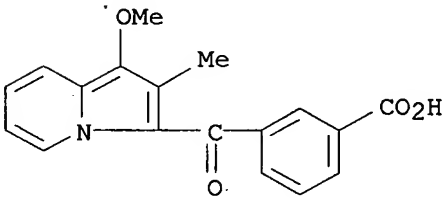

●2 HCl

RN 610766-56-8 CAPLUS
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, sodium salt (9CI) (CA INDEX NAME)



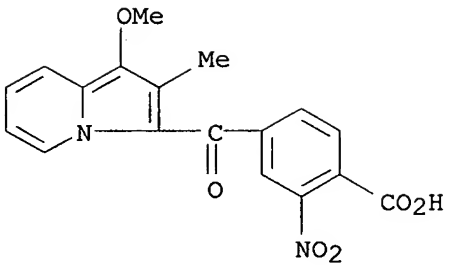

● Na

RN 610766-57-9 CAPLUS
CN Benzoic acid, 3-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, sodium salt (9CI) (CA INDEX NAME)



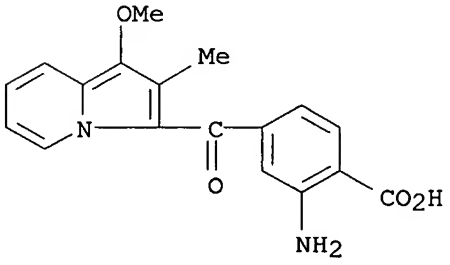

● Na

RN 610766-59-1 CAPLUS
CN Benzoic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-2-nitro-, sodium salt (9CI) (CA INDEX NAME)



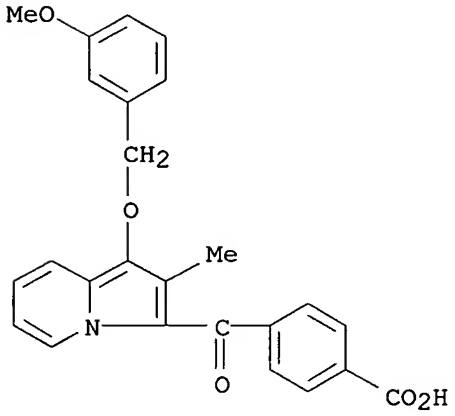

● Na

RN 610766-61-5 CAPLUS
CN Benzoic acid, 2-amino-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, monosodium salt (9CI) (CA INDEX NAME)




● Na

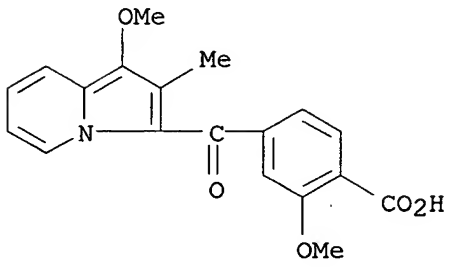
RN 610766-62-6 CAPLUS
CN Benzoic acid, 4-[[1-[(3-methoxyphenyl)methoxy]-2-methyl-3-indolizinyl]carbonyl]-, sodium salt (9CI) (CA INDEX NAME)




● Na

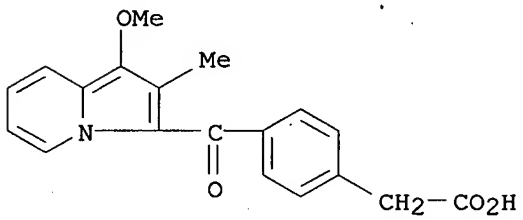
RN 610766-63-7 CAPLUS

CN Benzoic acid, 2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, sodium salt (9CI) .(CA INDEX NAME)



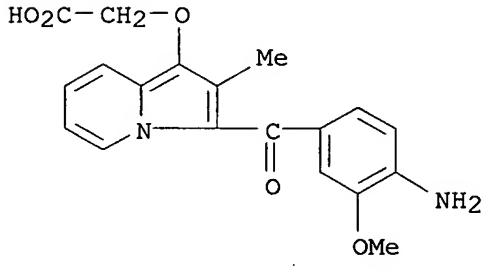

● Na

RN 610766-64-8 CAPLUS
CN Benzeneacetic acid, 4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]-, sodium salt (9CI) (CA INDEX NAME)

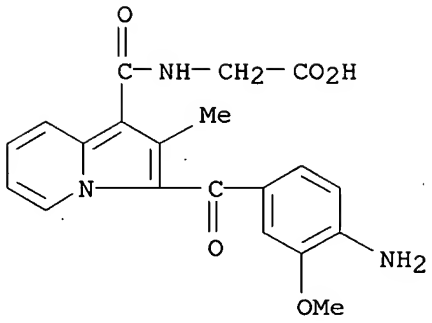



● Na

RN 610766-66-0 CAPLUS
CN Acetic acid, [[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]- (9CI) (CA INDEX NAME)

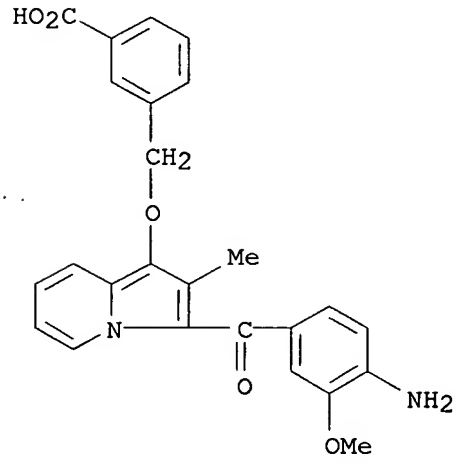



RN 610766-67-1 CAPLUS
CN Glycine, N-[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]carbonyl]-, monosodium salt (9CI) (CA INDEX NAME)



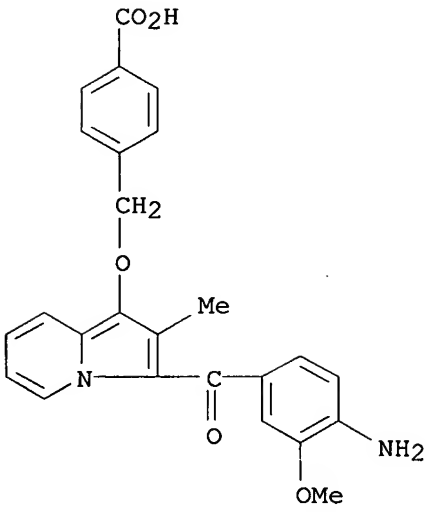
● Na

RN 610766-68-2 CAPLUS
CN Benzoic acid, 3-[[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]-, monosodium salt (9CI) (CA INDEX NAME)



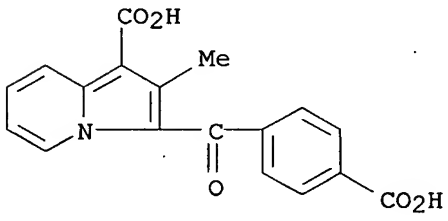
● Na

RN 610766-69-3 CAPLUS
CN Benzoic acid, 4-[[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]oxy]methyl]-, monosodium salt (9CI) (CA INDEX NAME)



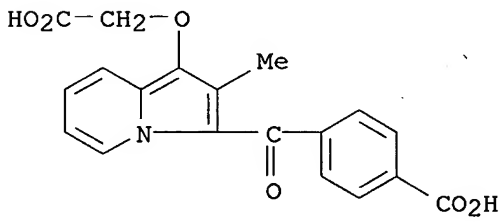
● Na

RN 610766-71-7 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-carboxybenzoyl)-2-methyl-, disodium salt (9CI) (CA INDEX NAME)



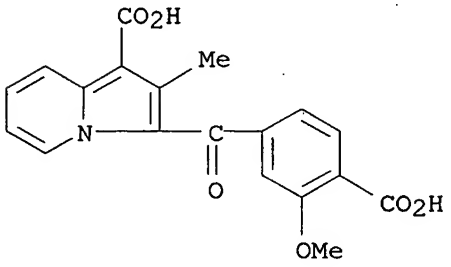
●2 Na

RN 610766-72-8 CAPLUS
CN Benzoic acid, 4-[[1-(carboxymethoxy)-2-methyl-3-indolizinyl]carbonyl]-, disodium salt (9CI) (CA INDEX NAME)



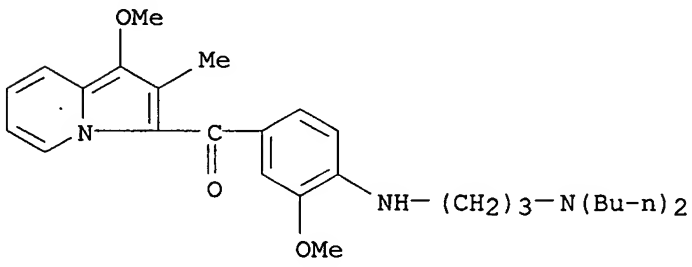
●2 Na

RN 610766-73-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-carboxy-3-methoxybenzoyl)-2-methyl-, disodium salt (9CI) (CA INDEX NAME)



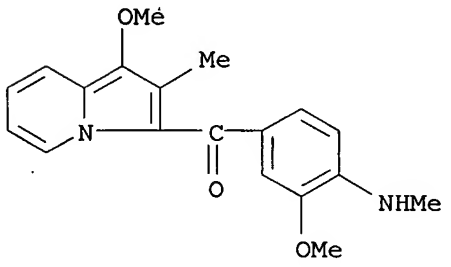
● 2 Na

RN 610766-74-0 CAPLUS
CN Methanone, [4-[[3-(dibutylamino)propyl]amino]-3-methoxyphenyl](1-methoxy-2-methyl-3-indolizinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



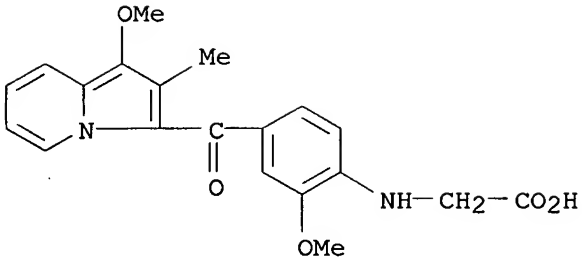
● HCl

RN 610766-75-1 CAPLUS
CN Methanone, [3-methoxy-4-(methylamino)phenyl](1-methoxy-2-methyl-3-indolizinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

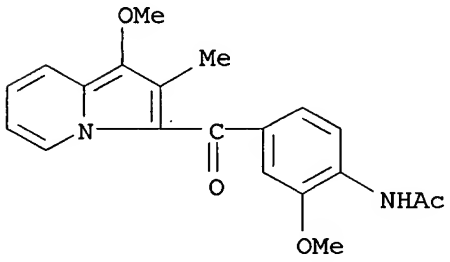


● HCl

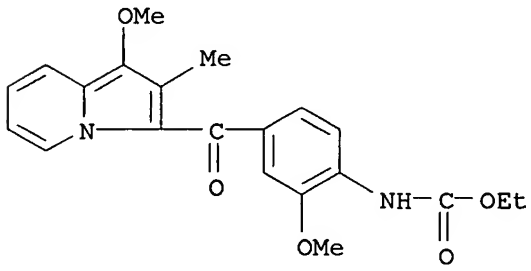
RN 610766-78-4 CAPLUS
CN Glycine, N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



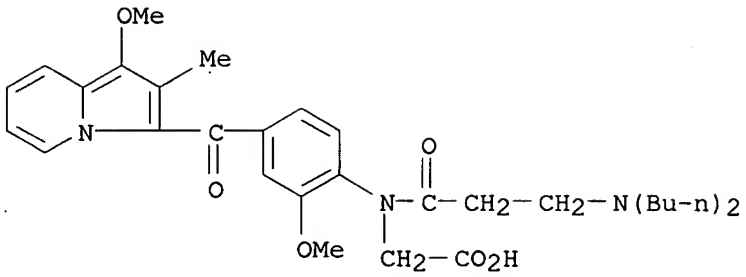

RN 610766-83-1 CAPLUS
CN Acetamide, N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)




RN 610766-84-2 CAPLUS
CN Carbamic acid, [2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

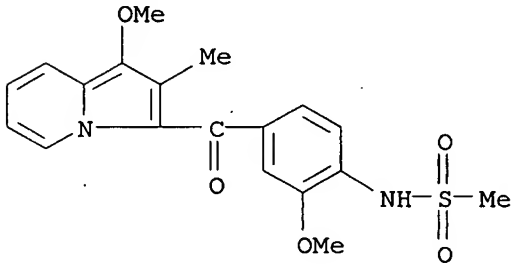



RN 610766-86-4 CAPLUS
CN Glycine, N,N-dibutyl-β-alanyl-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

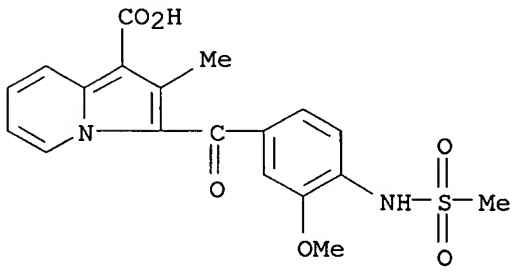


● HCl

RN 610766-91-1 CAPLUS
CN Methanesulfonamide, N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)

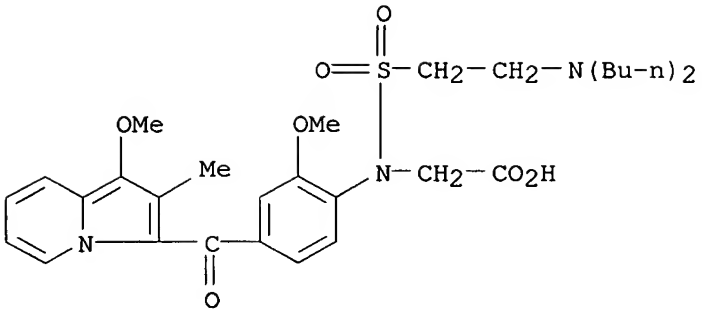


RN 610766-93-3 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-[3-methoxy-4-[(methylsulfonyl)amino]benzoyl]-2-methyl-, monosodium salt (9CI) (CA INDEX NAME)



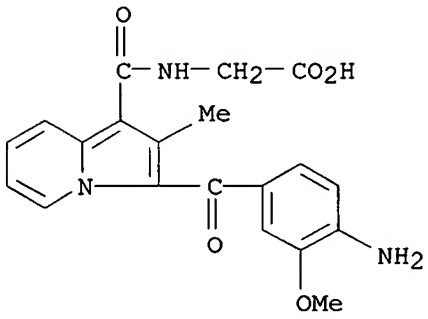
● Na

RN 610766-94-4 CAPLUS
CN Glycine, N-[[2-(dibutylamino)ethyl]sulfonyl]-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



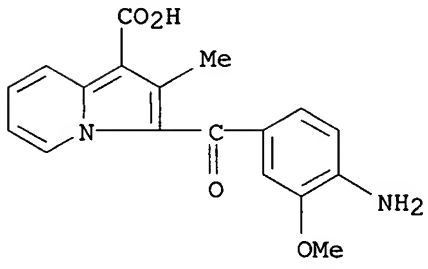
● HCl

RN 610767-02-7 CAPLUS
CN Glycine, N-[[3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinyl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)



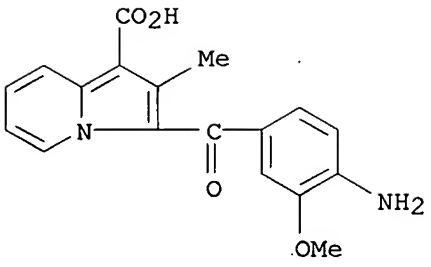
● HCl

RN 610767-05-0 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl-, monosodium salt (9CI) (CA INDEX NAME)



● Na

RN 610767-06-1 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

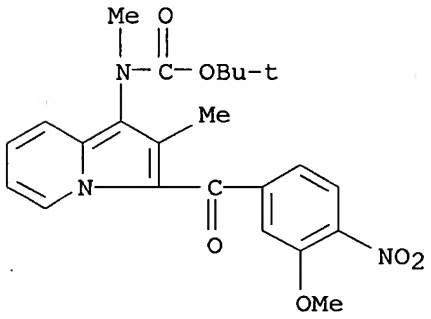


●x . HCl

IT 610767-01-6P, tert-Butyl N-[3-(3-methoxy-4-nitrobenzoyl)-2-methylindolizin-1-yl](methyl)carbamate 610767-10-7P, Benzyl 2-[[[2-(dibutylamino)ethyl]sulfonyl]-2-methoxy-4-[(1-methoxy-2-methyl-indolizin-3-yl)carbonyl]anilino]acetate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of indolizines as selective b-FGF inhibitors)

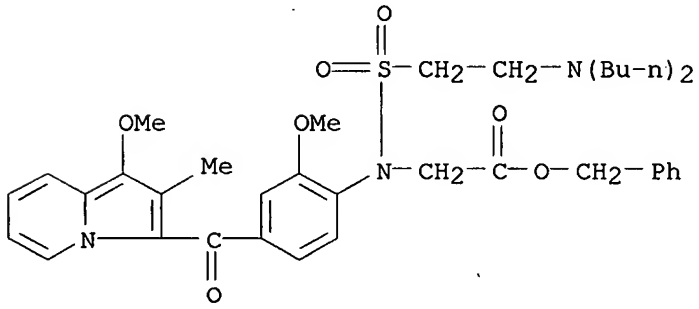
RN 610767-01-6 CAPLUS

CN Carbamic acid, [3-(3-methoxy-4-nitrobenzoyl)-2-methyl-1-indolizinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 610767-10-7 CAPLUS

CN Glycine, N-[[2-(dibutylamino)ethyl]sulfonyl]-N-[2-methoxy-4-[(1-methoxy-2-methyl-3-indolizinyl)carbonyl]phenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

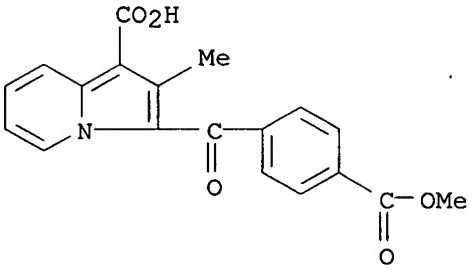


IT 610767-07-2P, 3-[4-(Methoxycarbonyl)benzoyl]-2-methyl-1-carboxyindolizine

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of indolizines as selective b-FGF inhibitors)

RN 610767-07-2 CAPLUS

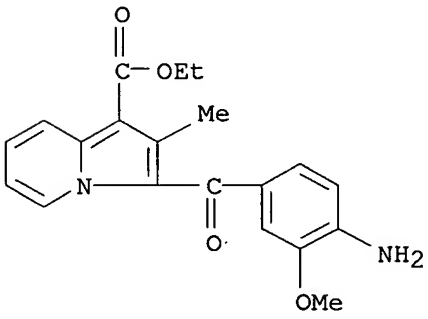
CN 1-Indolizinecarboxylic acid, 3-[4-(methoxycarbonyl)benzoyl]-2-methyl- (9CI) (CA INDEX NAME)




IT 610767-14-1, Ethyl 3-(4-amino-3-methoxybenzoyl)-2-methyl-1-indolizinecarboxylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolizines as selective b-FGF inhibitors)

RN 610767-14-1 CAPLUS

CN 1-Indolizinecarboxylic acid, 3-(4-amino-3-methoxybenzoyl)-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)




REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:221687 CAPLUS

DOCUMENT NUMBER: 138:238174

TITLE: Preparation of 2-(indolizin-1-yl)-N-(isothiazol-5-yl)-2-oxo-acetamides for treating cancer

INVENTOR(S): Koya, Keizo; Sun, Lijun; Ono, Mitsunori; Ying, Weiwen; Li, Hao

PATENT ASSIGNEE(S): SBR Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003022846 | A1 | 20030320 | WO 2002-US29154 | 20020913 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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| CA 2459886 | A1 | 20030320 | CA 2002-2459886 | | 20020913 |
| AU 2002333626 | A1 | 20030324 | AU 2002-333626 | | 20020913 |
| EP 1432709 | A1 | 20040630 | EP 2002-798231 | | 20020913 |
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| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | | |
| BR 2002012794 | A | 20041005 | BR 2002-12794 | | 20020913 |
| CN 1568324 | A | 20050119 | CN 2002-820284 | | 20020913 |
| JP 2005504795 | T | 20050217 | JP 2003-526921 | | 20020913 |
| AT 300542 | T | 20050815 | AT 2002-798231 | | 20020913 |
| PT 1432709 | T | 20051031 | PT 2002-798231 | | 20020913 |
| EP 1598352 | A1 | 20051123 | EP 2005-16203 | | 20020913 |
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| ES 2245747 | T3 | 20060116 | ES 2002-2798231 | | 20020913 |
| NZ 531700 | A | 20061027 | NZ 2002-531700 | | 20020913 |
| NO 2004001035 | A | 20040430 | NO 2004-1035 | | 20040311 |
| ZA 2004001996 | A | 20050531 | ZA 2004-1996 | | 20040311 |
| IN 2004DN00664 | A | 20050401 | IN 2004-DN664 | | 20040316 |
| HK 1063322 | A1 | 20051209 | HK 2004-106091 | | 20040813 |
| PRIORITY APPLN. INFO.: | | | US 2001-322020P | P | 20010913 |
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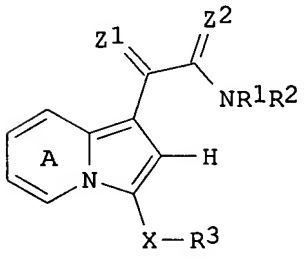
| | | | WO 2002-US29154 | W | 20020913 |

OTHER SOURCE(S): MARPAT 138:238174

GI

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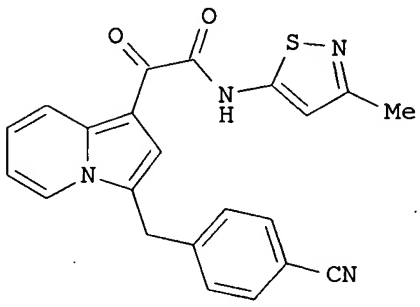



II

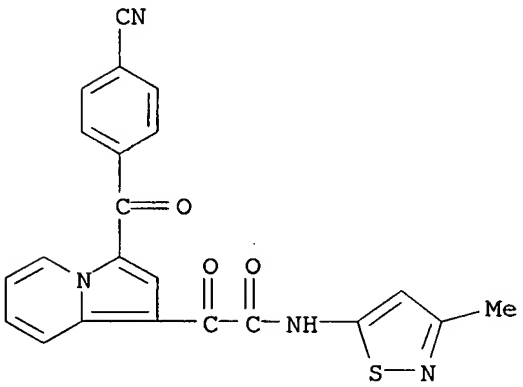
AB The title 1-glyoxylylamide indolizines [I; Ring A is (un)substituted and optionally fused to an aryl group; Z1, Z2 = O, S, N(OR12), NR12; R1, R2 = H, (un)substituted aliphatic group, (un)substituted non-aromatic heterocyclic group, etc.; or NR1R2 = (un)substituted non-aromatic nitrogen-containing heterocyclic group or nitrogen-containing heteroaryl group; R3 = (un)substituted aryl or aliphatic group; X = a bond, CR4R5, NR4, O, etc.; R4, R5 = H, (un)substituted aliphatic group; R12 = H, (un)substituted alkyl], useful in treating a multi-drug resistant cancer, were prepared E.g., multi-step synthesis of II, starting from 4-cyanophenacyl bromide and pyridine, was given. The compound II demonstrated significantly high anti-cancer activity (IC50: 0.01-0.05 μM) against seven cancer cell lines from different tissue type, and also high anti-cancer activity

(0.02-0.05 μM) against two MDR cancer cell lines.

IT 501948-27-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(indolizin-1-yl)-N-(isothiazol-5-yl)-2-oxo-acetamides for treating cancer)

RN 501948-27-2 CAPLUS

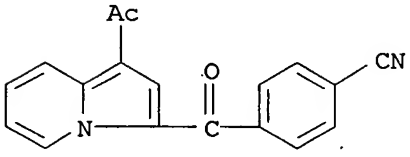
CN 1-Indolizineacetamide, 3-(4-cyanobenzoyl)-N-(3-methyl-5-isothiazolyl)-α-oxo- (9CI) (CA INDEX NAME)



IT 501948-41-0P, 1-Acetyl-3-(4-cyanobenzoyl)indolizine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-(indolizin-1-yl)-N-(isothiazol-5-yl)-2-oxo-acetamides for treating cancer)

RN 501948-41-0 CAPLUS

CN Benzonitrile, 4-[(1-acetyl-3-indolizinyl)carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 11-55

L4 ANSWER 11 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:53760 CAPLUS

DOCUMENT NUMBER: 138:255038

TITLE: A Novel Microwave-Mediated One-Pot Synthesis of Indolizines via a Three-Component Reaction

AUTHOR(S): Bora, Utpal; Saikia, Anil; Boruah, Romesh C.

CORPORATE SOURCE: Medicinal Chemistry Division, Regional Research Laboratory, Jorhat, 785006, India

SOURCE: Organic Letters (2003), 5(4), 435-438
CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

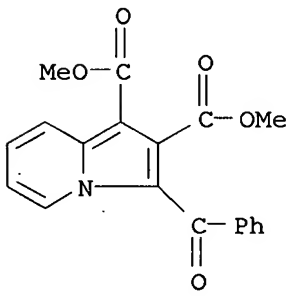
LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:255038

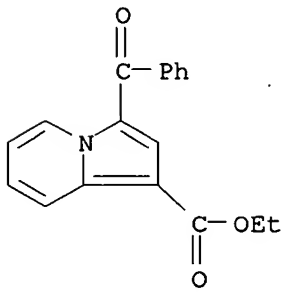
AB The microwave-mediated three-component reaction of acyl bromide, pyridine, and acetylene is catalyzed by basic alumina to give corresponding indolizines in excellent yields in a one-pot reaction.

IT 17281-78-6P 40624-43-9P 502762-20-1P
502762-21-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(microwave-mediated one-pot synthesis of indolizines via a three-component reaction)

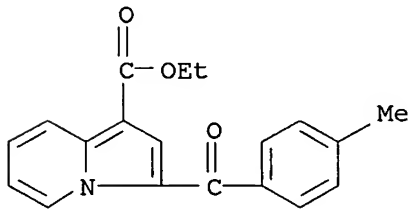
RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



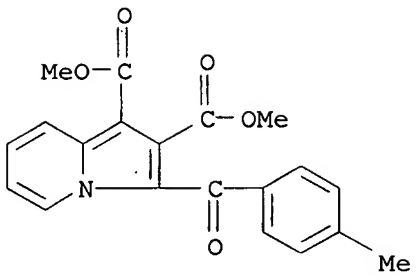
RN 40624-43-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 502762-20-1 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-(4-methylbenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)

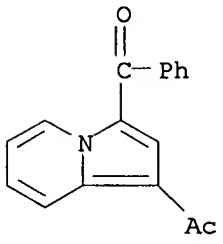


RN 502762-21-2 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-(4-methylbenzoyl)-, dimethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:911885 CAPLUS
DOCUMENT NUMBER: 138:161353
TITLE: Methyl 3-benzoyl-8-hydroxy-5-methoxyindolizine-1-carboxylate
AUTHOR(S): Usman, Anwar; Li, Yun; Zhang, Yan; Fun, Hoong Kun; Xu, Jian Hua
CORPORATE SOURCE: School of Physics, X-ray Crystallography Unit, Universiti Sains Malaysia, Penang, 11800 USM, Malay.
SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2002), E58(12), o1427-o1429
CODEN: ACSEBH; ISSN: 1600-5368
URL: http://journals.iucr.org/e/issues/2002/12/00/wn6127/index.html
PUBLISHER: International Union of Crystallography
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
AB In the title compound, C18H15NO5, the methoxycarbonyl substituent, disregarding H atoms, is almost coplanar with the indolizine ring system in each of the two crystallog. independent mols. in the asym. unit. In the crystal structure, symmetry-related mols. form mol. dimers, held together by two C-H...O H bonds, and are interconnected into a three-dimensional network by another C-H...O H bond. Crystallog. data are given.
IT 51386-41-5, 1-Acetyl-3-benzoylindolizine
RL: RCT (Reactant); RACT (Reactant or reagent)
(photooxygenation of)
RN 51386-41-5 CAPLUS
CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)



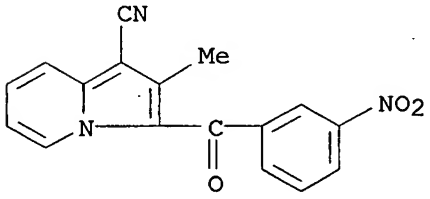
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:903424 CAPLUS
DOCUMENT NUMBER: 138:255048

TITLE: Isocyanatophosphoric acid dichloride: a novel reagent for the introduction of a cyano group into the molecules of electron-rich heterocycles and enamines
AUTHOR(S): Smaliy, Radomir V.; Chaikovskaya, Aleksandra A.; Pinchuk, Aleksandr M.; Tolmachev, Andrei A.
CORPORATE SOURCE: Institute of Organic Chemistry, National Academy of Sciences of the Ukraine, Kiev, 02094/94, Ukraine
SOURCE: Synthesis (2002), (16), 2416-2420
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:255048

AB A new synthetic method is developed which enables a direct one-step introduction of a cyano group into electron-rich heterocyclic systems of the indole, pyrrole, and indolizine series, and also to enamines using isocyanatophosphoryl dichloride. Thus, reaction of OCNP(O)Cl2 with N-methylpyrrole in ClCH2CH2Cl for 1h at 20° gave 64% 1-methyl-1H-pyrrole-2-carbonitrile.

IT 502925-11-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(isocyanatophosphoric acid dichloride as novel reagent for introduction of cyano group into electron-rich heterocycles and enamines)
RN 502925-11-3 CAPLUS
CN 1-Indolizinecarbonitrile, 2-methyl-3-(3-nitrobenzoyl)- (9CI) (CA INDEX NAME)

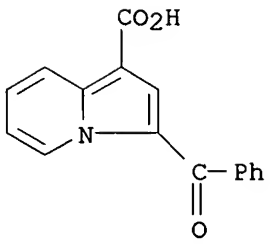



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

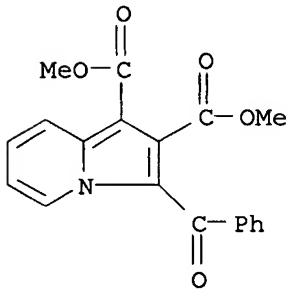
L4 ANSWER 14 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:861066 CAPLUS
DOCUMENT NUMBER: 139:117275
TITLE: Product class 16: indolizines
AUTHOR(S): Shipman, M.
CORPORATE SOURCE: School of Chemistry, University of Exeter, Exeter, EX4 4QD, UK
SOURCE: Science of Synthesis (2001), 10, 745-787
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review describes some of the most useful methods for the synthesis of indolizines. The methods described are categorized as synthesis by ring-closure reactions; ring transformation; and substituent modification.

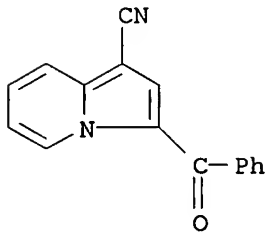
IT 25627-87-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolizines and synthetic modification of substituents)
RN 25627-87-6 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



IT 17281-78-6P 25627-81-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of indolizines via ring-closure reactions and ring transformations)
RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 25627-81-0 CAPLUS
CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 176 THERE ARE 176 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:482859 CAPLUS
DOCUMENT NUMBER: 135:282674
TITLE: 4-(Benzoylindolizinyl)butyric acids; novel nonsteroidal inhibitors of steroid 5α-reductase. III
AUTHOR(S): Sawada, Kozo; Okada, Satoshi; Kuroda, Akio; Watanabe, Shinya; Sawada, Yuki; Tanaka, Hirokazu
CORPORATE SOURCE: Exploratory Research Laboratories, Fujisawa Pharmaceutical Co., Ltd., Tsukuba, 300-2698, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (2001), 49(7), 799-813
CODEN: CPBTAL; ISSN: 0009-2363

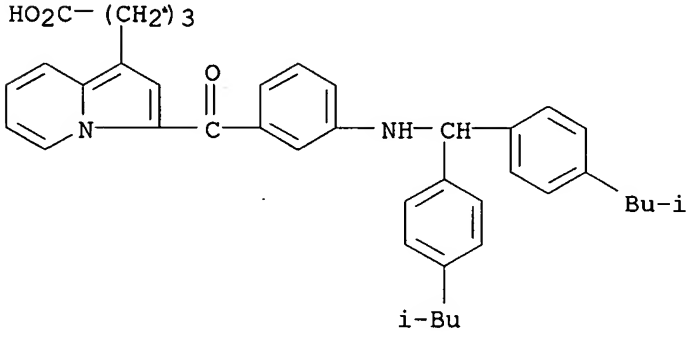
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:282674

AB A novel series of indolizinebutyric acids with various benzoyl substituents was synthesized to develop nonsteroidal inhibitors of steroid 5α-reductase, and the structure-activity relationships in this series were studied. The authors previously reported the structure-activity relationships in a series of indolebutyric acids as well as the discovery of the novel nonsteroidal 5α-reductase inhibitor, FK143. The authors have now made other modifications to this compound to improve in vivo inhibitory activity. By altering the heterocyclic nucleus and changing the benzoyl substituent the authors have succeeded in identifying the strongly active compound, FK687, (S)-4-[1-[4-[[1-(4-isobutylphenyl)butyl]oxy]benzoyl]indolizin-3-yl]butyric acid, which displays strong in vitro inhibitory activity against the human enzyme and in vivo inhibitory activity against the castrated young rat model. This compound should be a useful agent for the treatment of benign prostatic hyperplasia.

IT 365280-19-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (benzoylindolizinyl)butyric acids as novel nonsteroidal inhibitors of steroid 5α-reductase in relation to structure and treatment of benign prostatic hyperplasia)

RN 365280-19-9 CAPLUS

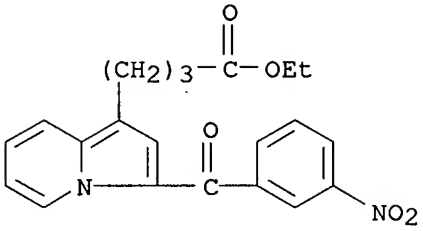
CN 1-Indolizinebutanoic acid, 3-[3-[[bis[4-(2-methylpropyl)phenyl]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



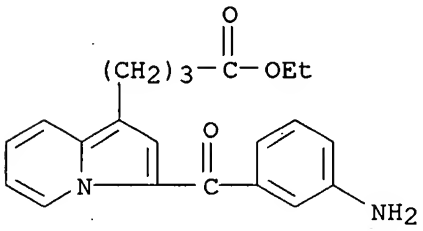

IT 146922-53-4P 146922-61-4P 146923-35-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (benzoylindolizinyl)butyric acids as novel nonsteroidal inhibitors of steroid 5α-reductase in relation to structure and treatment of benign prostatic hyperplasia)

RN 146922-53-4 CAPLUS

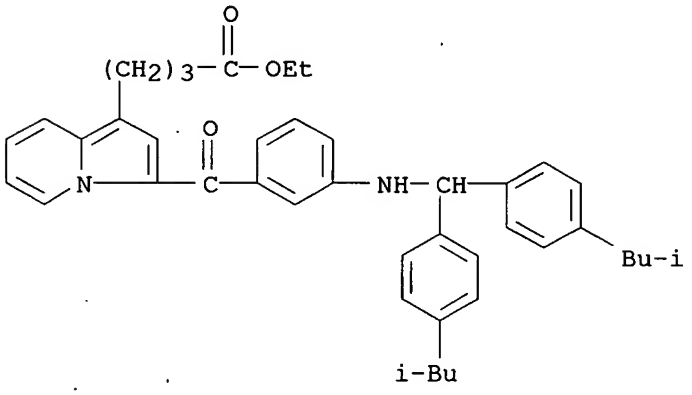
CN 1-Indolizinebutanoic acid, 3-(3-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 146922-61-4 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-aminobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



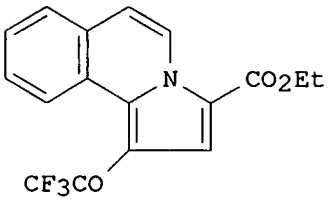
RN 146923-35-5 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[bis[4-(2-methylpropyl)phenyl]methyl]amino]benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:801102 CAPLUS
DOCUMENT NUMBER: 132:122502
TITLE: Preparation of 1-(trifluoroacetyl)indolizines and their derivatives via cycloaddition of pyridinium N-ylides with 4-ethoxy-1,1,1-trifluorobut-3-en-2-one
AUTHOR(S): Zhu, Shi-zheng; Qin, Chao-yue; Wang, Yan-Li; Chu, Qian-li
CORPORATE SOURCE: Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SOURCE: Journal of Fluorine Chemistry (1999), 99(2), 183-187
CODEN: JFLCAR; ISSN: 0022-1139

PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:122502
GI



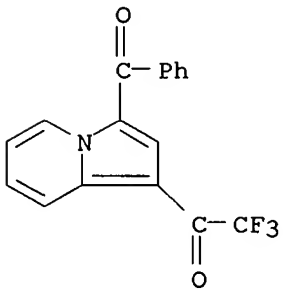

I

AB Under basic reaction conditions pyridinium or isoquinolinium N-ylides (C5H5N+CH2Y Br- or C9H7N+CH2Y Br-; Y = CO2Me, CO2Et, CN, PhCO) reacted readily with 4-ethoxy-1,1,1-trifluorobut-3-en-2-one to give 1-(trifluoroacetyl)indolizines or -pyrrolo[1,2-a]isoquinolines. The mol. structure of product I was determined

IT 256234-53-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(cycloaddn. of pyridinium or isoquinolinium N-ylides with ethoxytrifluorobutenone)

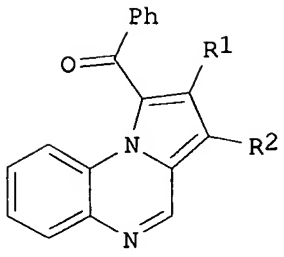
RN 256234-53-4 CAPLUS

CN Ethanone, 1-(3-benzoyl-1-indolizinyl)-2,2,2-trifluoro- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:563227 CAPLUS
DOCUMENT NUMBER: 131:310616
TITLE: Novel 1,3-dipolar cycloaddition of quinoxalinium N-ylide to alkene promoted by MnO2: a new approach to synthesis of pyrrolo[1,2-a]-quinoxalines
AUTHOR(S): Zhou, Jian; Zhang, Lande; Hu, Yuefei; Hu, Hongwen
CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210093, Peop. Rep. China
SOURCE: Journal of Chemical Research, Synopses (1999), (9), 552-553
CODEN: JRPSDC; ISSN: 0308-2342
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:310616
GI



I

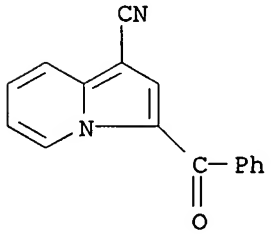
AB A novel approach to synthesize pyrrolo[1,2-a]quinoxalines I [R1 = H, CO2Et, R2 = cyano, CO2Me, COMe, CO2Et; R1R2 = CO(NPh)CO] was developed successfully by 1,3-dipolar cycloaddn. of a quinoxalinium N-ylide to alkenes R1CH:CHR2 in the presence of MnO2 under very convenient conditions and with moderate yields (40-52%).

IT 25627-81-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyrroloquinoxalines by dipolar cycloaddn. of alkenes to quinoxalinium N-ylide)

RN 25627-81-0 CAPLUS

CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:327734 CAPLUS

DOCUMENT NUMBER: 131:73717

TITLE: C-acylation of electron-rich heterocyclic compounds with Kirsanov isocyanate

AUTHOR(S): Tolmachev, Andrei A.; Chaikovskaya, Aleksandra A.; Smaliy, Radomir V.; Kudrya, Tamara N.; Yurchenko, Aleksandr A.; Pinchuk, Aleksandr M.

CORPORATE SOURCE: Institute of Organic Chemistry, National Academy of Sciences of Ukraine, Kiev, 253660, Ukraine

SOURCE: Heteroatom Chemistry (1999), 10(4), 343-348
CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

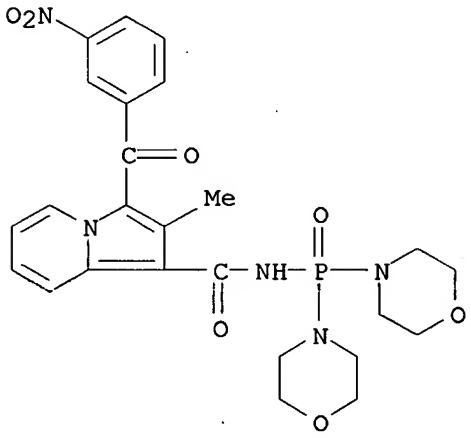
LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:73717

AB Pyrroles, indoles, indolizines, and 2-methylfuran are vigorously C-acylated with isocyanatophosphoryl dichloride. E.g., N-methylpyrrole reacts with Cl2P(O)NCO in octane at room temperature to give a 90% yield of 1-methylpyrrole-2-carboxamidophosphoryl dichloride. The resulting heteroaryl-substituted isocyanatophosphoryl dichlorides provide a convenient access to a variety of products.

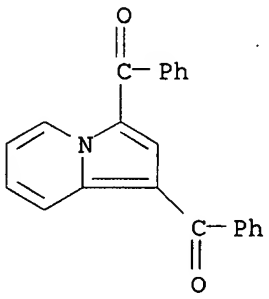
IT 228566-54-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 228566-54-9 CAPLUS
CN 1-Indolizinecarboxamide, N-(di-4-morpholinylphosphinyl)-2-methyl-3-(3-nitrobenzoyl)- (9CI) (CA INDEX NAME)

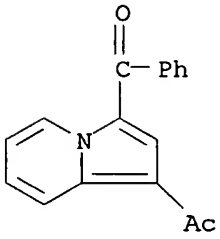


REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

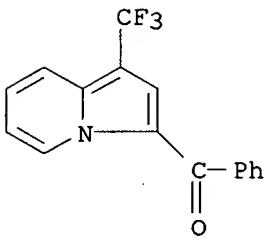
L4 ANSWER 19 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:281626 CAPLUS
DOCUMENT NUMBER: 130:337991
TITLE: Facile one-step synthesis of 1-acylindolizines by the reaction of pyridinium salts with Mannich bases in the presence of TPCD
AUTHOR(S): Wang, Bing-Xiang; Hu, Jia-Xin; Hu, Yue-Fei; Hu, Hong-Wen
CORPORATE SOURCE: Dep. Chem., Nanjing Univ., Nanjing, 210093, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1999), 20(3), 418-420
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A facile one-step method is presented for the synthesis of 1-acylindolizines in moderate yield by the reaction of pyridinium salts with Mannich bases in the presence of NaHCO3 and a mild oxidizing agent, tetrakispyridine cobalt dichromate (TPCD). For example, 1-acetyl-3-benzoylindolizine was prepared in 36% yield from phenacylpyridinium bromide and 4-dimethylamino-2-butanone hydrochloride.
IT 17281-91-3P 51386-41-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of 1-acylindolizines by reaction of pyridinium salts with Mannich bases in presence of TPCD)
RN 17281-91-3 CAPLUS
CN Methanone, 1,3-indolizinediylbis[phenyl- (9CI) (CA INDEX NAME)



RN 51386-41-5 CAPLUS
CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)

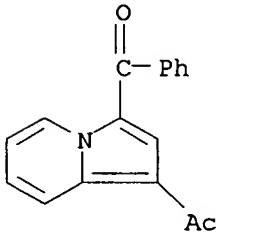


L4 ANSWER 20 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:43858 CAPLUS
DOCUMENT NUMBER: 130:139271
TITLE: A one-step approach to 1-(fluoroalkyl)indolizine derivatives
AUTHOR(S): Zhang, Xue-chun; Huang, Wei-yuan
CORPORATE SOURCE: Laboratory Organofluorine Chemistry, Shanghai Institute Organic Chemistry, Chinese Academy Sciences, Shanghai, 200032, Peop. Rep. China
SOURCE: Synthesis (1999), (1), 51-54
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:139271
AB A facile 1-step method is presented for the synthesis of 1-(fluoroalkyl)-substituted indolizines in moderate to good yields by reactions of pyridinium, 4-methylpyridinium isoquinolinium, and pyridazinium ylides with CF3CBr:CH2 and Cl(CF2)nCH:CHI (n = 2, 4, 6), resp., in the presence of base.
IT 135339-04-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (fluoroalkyl)indolizines)
RN 135339-04-7 CAPLUS
CN Methanone, phenyl[1-(trifluoromethyl)-3-indolizinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

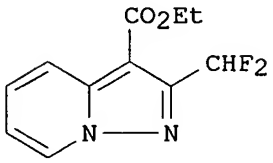
L4 ANSWER 21 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:547782 CAPLUS
DOCUMENT NUMBER: 129:290034
TITLE: Preparation of indolizine by intramolecular 1,5-dipolar cycloaddition of pyridinium N-allylides
AUTHOR(S): Zhou, Jian; Hu, Yue-Fei; Hu, Hong-Wen
CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210093, Peop. Rep. China
SOURCE: Chemical Research in Chinese Universities (1998), 14(2), 213-214
CODEN: CRCUED; ISSN: 1000-9213
PUBLISHER: Higher Education Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pyridinium or isoquinolinium allylides, prepared by treatment of 1-chloro-1-buten-3-one and the corresponding pyridinium or isoquinolinium salts with Et3N at room temperature, were heated in toluene 3-5 h to give 34-55% indolizines and benzo[g]indolizines.
IT 51386-41-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of indolizine by intramol. 1,5-dipolar cycloaddn. of pyridinium N-allylides)
RN 51386-41-5 CAPLUS
CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:121449 CAPLUS
DOCUMENT NUMBER: 128:217319
TITLE: A convenient synthesis of polyfluoroalkyl-substituted pyrazolo[1,5-a]pyridine, pyrrolo[1,2-b]pyridazine and indolizine derivatives
AUTHOR(S): Zhang, Xue-chun; Huang, Wei-yuan
CORPORATE SOURCE: 354 Fenglin Lu, Shanghai Institute of Organic Chemistry, Laboratory of Organofluorine Chemistry,

Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SOURCE: Journal of Fluorine Chemistry (1998), 87(1), 57-64
CODEN: JFLCAR; ISSN: 0022-1139
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

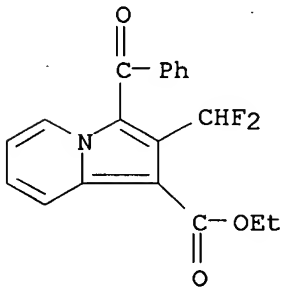


I

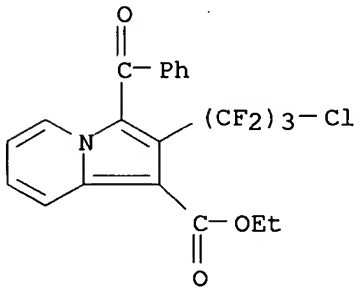
AB In the presence of base, Et 2,2-dihydropoly(per)fluoroalkanoates reacted with N-aminopyridinium iodide, N-amino-γ-picolinium iodide or N-aminoisoquinolinium iodide, N-phenacylpyridazinium, N-phenacylpyridinium, and N-phenacylisoquinolinium bromides in DMF to give poly(per)fluoroalkyl-substituted pyrazolo[1,5-a] pyridine, e.g., I, pyrrolo[1,2-a]pyridazine, and indolizine derivs.

IT 204136-68-5P 204136-69-6P 204136-70-9P
204136-71-0P 204136-79-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

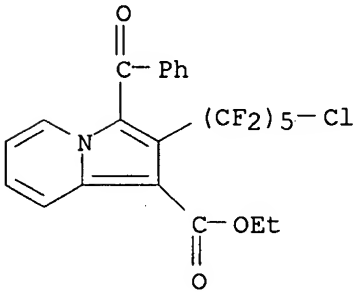
RN 204136-68-5 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-(difluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



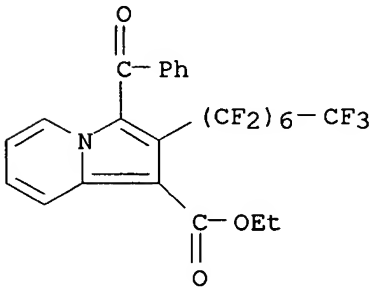
RN 204136-69-6 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-(3-chloro-1,1,2,2,3,3-hexafluoropropyl)-, ethyl ester (9CI) (CA INDEX NAME)



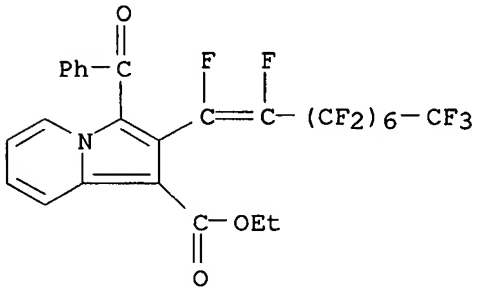
RN 204136-70-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-(5-chloro-1,1,2,2,3,3,4,4,5,5-decafluoropentyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 204136-71-0 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-(pentadecafluoroheptyl)-, ethyl ester (9CI) (CA INDEX NAME)



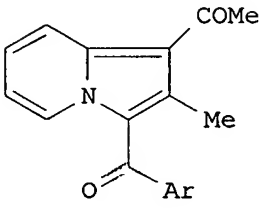
RN 204136-79-8 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-(1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-1-nonenyl)-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:748900 CAPLUS
DOCUMENT NUMBER: 128:61394
TITLE: Hetarenes with a bridge nitrogen atom. 5. Synthesis of the indolizine ring by transformation of the oxazolo[3,2-a]pyridinium cation when treated with acetylacetone
AUTHOR(S): Babaev, E. V.; Bozhenko, S. V.
CORPORATE SOURCE: M. V. Lomonosov Moscow State University, Moscow,

119899, Russia
SOURCE: Chemistry of Heterocyclic Compounds (New York)(Translation of Khimiya Geterotsiklicheskikh Soedinenii) (1997), 33(1), 125-126
CODEN: CHCCAL; ISSN: 0009-3122
PUBLISHER: Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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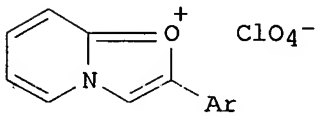
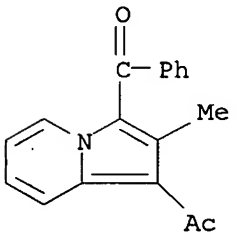
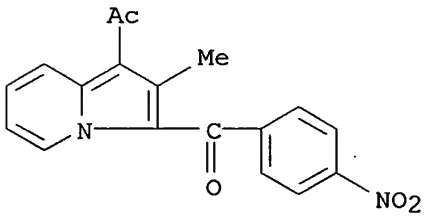


II

AB Indolizines I (Ar = Ph, 4-O2NC6H4) were prepared by the reaction of Na+-CH(COMe)2 with oxazolopyridinium perchlorates II.
IT 200355-81-3P 200355-82-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of indolizines by cyclocondensation of acetylacetone with oxazolopyridinium perchlorates)
RN 200355-81-3 CAPLUS
CN Ethanone, 1-(3-benzoyl-2-methyl-1-indolizinyl)- (9CI) (CA INDEX NAME)




RN 200355-82-4 CAPLUS
CN Ethanone, 1-[2-methyl-3-(4-nitrobenzoyl)-1-indolizinyl]- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:246472 CAPLUS
DOCUMENT NUMBER: 126:293244
TITLE: A convenient synthesis of 1-acylindolizines by

1,3-dipolar cycloaddition reactions of pyridinium ylides and α,β-unsaturated aldehydes or ketones in the presence of tetrapyridinecobalt dichromate

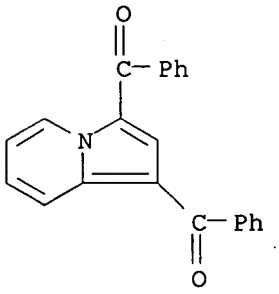
AUTHOR(S): Zhang, Xuechun; Cao, Weili; Wei, Xudong; Hu, Hongwen
CORPORATE SOURCE: Department of Chemistry, Nanjing University, Nanjing, 210093, Peop. Rep. China

SOURCE: Synthetic Communications (1997), 27(8), 1395-1403
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English

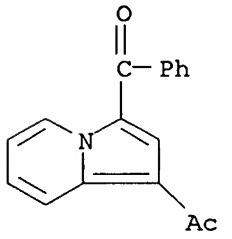
AB In the presence of tetrapyridinecobalt dichromate (CoPy4(HCrO4)2), pyridinium ylides and α,β-unsatd. aldehydes or ketones undergo 1,3-dipolar cycloaddn. reactions followed by in situ aromatization to give 1-acyl substituted indolizines in moderate to good yields.

IT 17281-91-3P 51386-41-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 17281-91-3 CAPLUS
CN Methanone, 1,3-indolizinediylbis[phenyl- (9CI) (CA INDEX NAME)




RN 51386-41-5 CAPLUS
CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:239019 CAPLUS
DOCUMENT NUMBER: 126:330534
TITLE: Indolizines. 4. The synthesis of new 3-vinylindolizines

AUTHOR(S): De Bue, G.; Nasielski, J.
CORPORATE SOURCE: Service de Chimie Organique CP 160/06, Universite Libre de Bruxelles, Brussels, 1050, Belg.

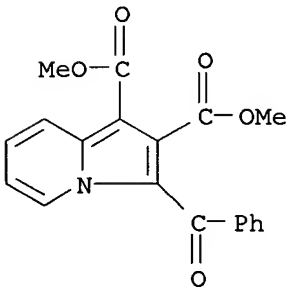
SOURCE: Bulletin des Societes Chimiques Belges (1997), 106(2), 97-108
CODEN: BSCBAG; ISSN: 0037-9646

PUBLISHER: Bulletin des Societes Chimiques Belges
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 126:330534

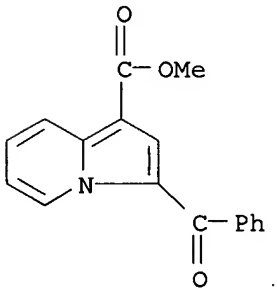
AB New 3-vinylindolizines have been synthesized by two methods. The first strategy calls for the Wittig olefination of 3-acylindolizines with methylenetriphenylphosphorane or methoxymethylenetriphenylphosphorane. The best yields are obtained when the ylide is formed at room temperature and the condensation in refluxing THF. The required 3-acylindolizines were obtained by direct acylation of indolizines or by 1,3-dipolar cycloaddns. to acylmethylpyridinium ylides. The following 3-isopropenylindolizines were made with good yields: unsubstituted (85%), 2-Me (98%), 2-C6H5 (95%), 1-COOMe (98%), 1-COOMe-2-C6H5 (91%), 1,2-di-COOMe (58%). Also synthesized are the following 3-α-styrylindolizines: 2-C6H5 (99%), 1-COOMe (93%), 1-COOMe-2-C6H5 (87%), 1,2-di-COOMe (66%). 3-(α-Methyl-β-methoxyvinyl)indolizines E (40%) and Z (40%) were also obtained. The second strategy involves the 1,3-dipolar cycloaddn. of dipolarophiles to allylpyridinium ylides. The following new 3-vinylindolizines have been synthesized: 1-carbomethoxy-3-vinylindolizine (21%), 1,2-dicarbomethoxy-3-vinylindolizine (16%), 1-carbomethoxy-3-β-styrylindolizine (43%), 3-β-styrylindolizine (17%), and 1-carbomethoxy-3-(β-carbomethoxy)vinylindolizine (31%).

IT 17281-78-6P 17281-79-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of vinylindolizines)

RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)

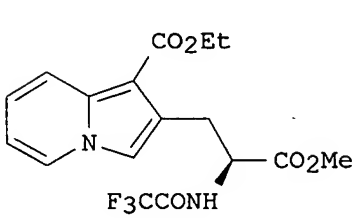


RN 17281-79-7 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:136196 CAPLUS
DOCUMENT NUMBER: 126:251363
TITLE: A novel approach to the synthesis of 3-acyl-substituted indolizines. The synthesis of 3-(indolizin-2yl)alanine-, and 4-(indolizin-3yl)homoalanine derivatives
AUTHOR(S): Jukic, Lucija; Bratusek, Urska; Skof, Marko; Svete, Jurij; Stanovnik, Branko
CORPORATE SOURCE: Fac. Chem. Chem. Technol., Univ. Ljubljana, Ljubljana, Slovenia
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1996), (11/12), 1510-1514
CODEN: KGSSAQ; ISSN: 0132-6244
PUBLISHER: Latviiskii Institut Organicheskogo Sinteza
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

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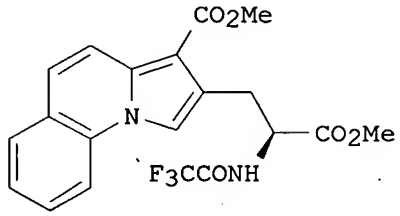
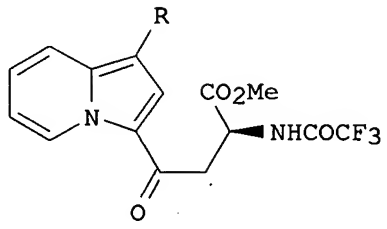



II



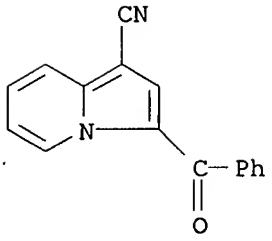

III

AB A novel approach to the synthesis of 3-acylindolizines and the transformation of some heterocycloacetic acids into tryptophan analogs are described. Reaction of Et 2-pyridinylacetate and Me 2-quinolinylacetate with N-trifluoroacetyl-5-bromo-4-oxonorvaline Me ester led to esters I and II, resp. Treatment of Et 2-pyridinylacetate and 2-pyridinylacetonitrile, first with N,N-dimethylformamide di-Me acetal (DMFDMA) followed by reaction with phenacyl bromide, gave the corresponding 3-benzoylindolizines, while the reaction of Et 2-pyridinylacetate and 2-pyridinylacetonitrile with DMFDMA, followed by treatment with (S)-N-trifluoroacetyl-5-bromo-4-oxonorvaline Me ester, gave III (R = CN, CO2Et).

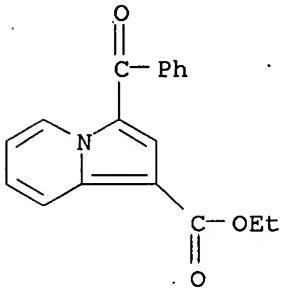
IT 25627-81-0P 40624-43-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of acyl-substituted indolizines and indolizine-containing alanines)

RN 25627-81-0 CAPLUS

CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)

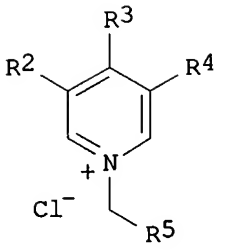


RN 40624-43-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:386641 CAPLUS
DOCUMENT NUMBER: 125:195514
TITLE: Preparation of new nitrogen-bridged heterocycles. 42. Synthesis and the reaction of pyridinium N-ylides using bifunctional ethyl thiocyanatoacetates
AUTHOR(S): Kakehi, Akikazu; Ito, Suketaka; Hashimoto, Yasunobu
CORPORATE SOURCE: Fac. Eng., Shinshu Univ., Nagano, 380, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1996), 69(6), 1769-1776
CODEN: BCSJA8; ISSN: 0009-2673
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:195514
GI

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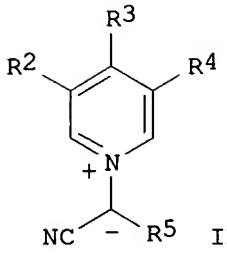
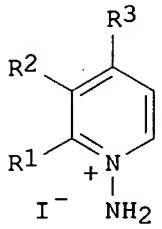
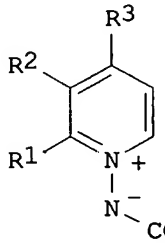


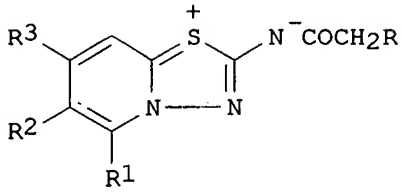

II




III




IV



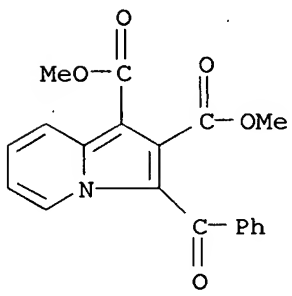

V

AB Various pyridinium (monosubstituted methylide)s I (R2, R3, R4 = H, Me; R5 = cyano, CO2Et, COMe, COPh) were smoothly attached to the cyano group in Et thiocyanatoacetate or Et 2-thiocyanatopropionate to afford the corresponding pyridinium (substituted cyanomethylide)s II in low-to-moderate yields, while pyridinium (unsubstituted amidate)s III (R1, R2, R3 = H, Me) reacted with the ester carbonyl group in the same reagents to give pyridinium (thiocyanatoacetato)- or (2-thiocyanatopropiono)amidates IV in considerable yields. The 1,3-dipolar cycloaddns. of some pyridinium (unsym. substituted cyanomethylide)s with di-Me acetylenedicarboxylate (DMAD) in various solvents afforded only di-Me 3-cyanoindolizine-1,2-dicarboxylate, except for a few examples. On the other hand, the treatment of pyridinium (thiocyanatoaceto)- or (2-thiocyanatopropiono)amidates with a strong base, such as potassium tert-butoxide, gave new bicyclic mesoionic compds., N-[2-(1,3,4-thiadiazolo[3,2-a]pyridinio)]acetamidate derivs. V, in moderate yields. The intermediacy of N-[1-(2-thiocyanatopyridinio)]acetamidates in the formation reactions of the latter compds. was also proven by independent syntheses.

IT 17281-78-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reactions of pyridinium N-ylides using bifunctional thiocyanatoacetates)

RN 17281-78-6 CAPLUS

CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



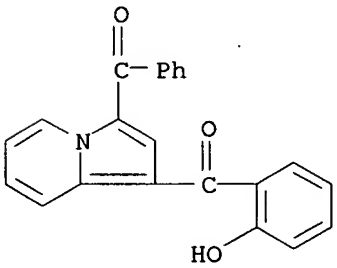
L4 ANSWER 28 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:120326 CAPLUS
DOCUMENT NUMBER: 124:260793
TITLE: Benzopyrans: Part 34. Reactions of 3-substituted 1-benzopyran-4-ones with N-phenacylpyridinium bromide
AUTHOR(S): Ghosh, Chandra Kanta; Sahana, Sirin
CORPORATE SOURCE: Dep. Biochem., Calcutta Univ., Calcutta, 700 019, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(3), 203-6
CODEN: IJSBDB; ISSN: 0376-4699
PUBLISHER: Publications & Information Directorate, CSIR
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:260793
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

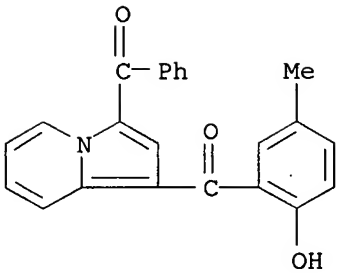
AB N-Phenacylpyridinium bromide reacted with benzopyanones I (R = H, Me, Cl, Br; X = CHO, CO2H) in Me2CO containing KCO3 to give mixts. of the indolizines II and pyridinium salts III. Similar treatment of N-phenacylpyridinium bromide with I (R = H, Me; X = CN) gave the azirines IV, and reaction of N-phenacylpyridinium bromide with I (R = H, Me; X = CO2Me) gave the zwitterions V. The pyridinium bromides III were converted into I by refluxing in pyridine.

IT 100421-20-3P 175353-64-7P 175353-65-8P
175353-66-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(formation of benzoylindolizines and pyridinium salts by reaction of benzopyranones with phenacylpyridinium bromides)

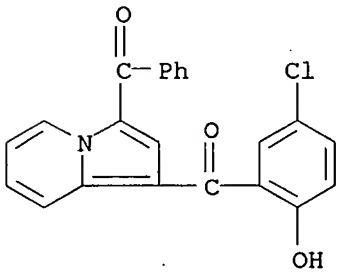
RN 100421-20-3 CAPLUS
CN Methanone, (3-benzoyl-1-indolizinyl)(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



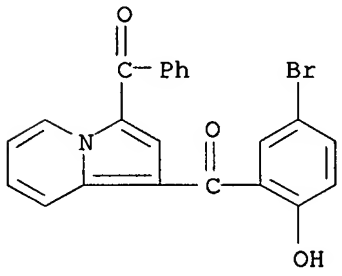

RN 175353-64-7 CAPLUS
CN Methanone, (3-benzoyl-1-indolizinyl)(2-hydroxy-5-methylphenyl)- (9CI) (CA INDEX NAME)



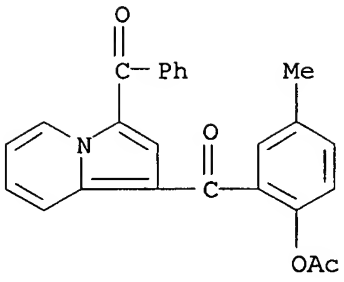
RN 175353-65-8 CAPLUS
CN Methanone, (3-benzoyl-1-indolizinyl)(5-chloro-2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



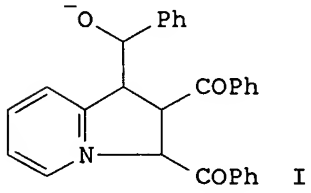
RN 175353-66-9 CAPLUS
CN Methanone, (3-benzoyl-1-indolizinyl)(5-bromo-2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



IT 176181-69-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 176181-69-4 CAPLUS
CN Methanone, [1-[2-(acetyloxy)-5-methylbenzoyl]-3-indolizinyl]phenyl- (9CI) (CA INDEX NAME)



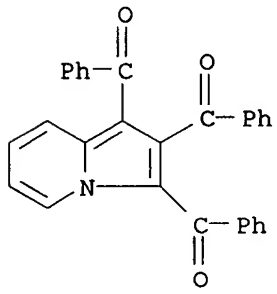
L4 ANSWER 29 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:482938 CAPLUS
DOCUMENT NUMBER: 121:82938
TITLE: Crystal and molecular structure of 1,2,3-tribenzoylindolizine
AUTHOR(S): Wei, Xudong; Hu, Hongwen; Yu, Kaibei
CORPORATE SOURCE: Dep. Chem., Nanjing Univ., Nanjing, 210008, Peop. Rep. China
SOURCE: Jiegou Huaxue (1993), 12(1), 26-8
CODEN: JHUADF; ISSN: 0254-5861
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:82938
GI



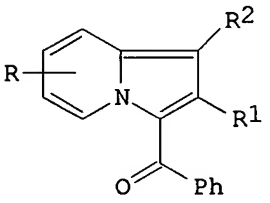
I

AB Crystal and mol. structure of the title compound I was determined by single crystal X-ray diffraction anal. The indolizine ring is conjugated only with the 1-benzoyl group.

IT 17281-90-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal and mol. structure of)
RN 17281-90-2 CAPLUS
CN Methanone, 1,2,3-indolizinetriyltris[phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 30 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:270005 CAPLUS
DOCUMENT NUMBER: 120:270005
TITLE: A facile one-step synthesis of aromatic indolizines by 1,3-dipolar cycloaddition of pyridinium and related heteroaromatic ylides with alkenes in the presence of TPCD [Copy4(HCrO4)2]
AUTHOR(S): Wei, Xudong; Hu, Yuefei; Li, Tingsheng; Hu, Hongwen
CORPORATE SOURCE: Dep. Chem., Nanjing Univ., Nanjing, 210008, Peop. Rep. China
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1993), (20), 2487-9
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:270005
GI



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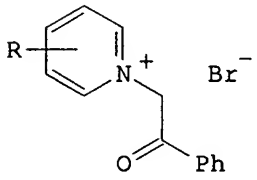
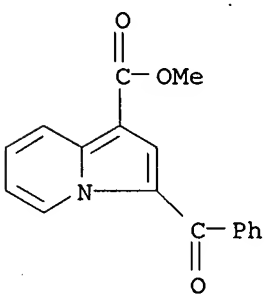


II

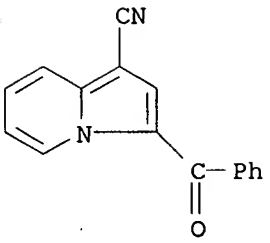
AB A facile and general one-step method is presented for the preparation of aromatic indolizine compds. I (R-R2 = alkyl, etc.) in moderate to high yields (53-99%) by reaction of the pyridinium N-ylides II (R = alkyl), quinolinium ylide or isoquinolinium ylide with various olefinic dipolarophiles, such as acrylonitrile, Me acrylate, acrylamide, di-Et maleate and Me crotonate, resp., in the presence of a new oxidant TPCD [Copy4(HCrO4)2, tetrapyridinecobalt(II) dichromate] at 90 °C for 2 h in DMF.

IT 17281-79-7P, Methyl 3-benzoylindolizine-1-carboxylate
25627-81-0P, 3-Benzoyl-1-cyanoindolizine 25627-86-5P
154224-58-5P 154224-59-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation from pyridinium ylide and alkene)

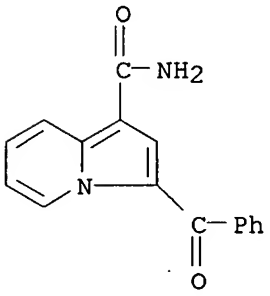
RN 17281-79-7 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



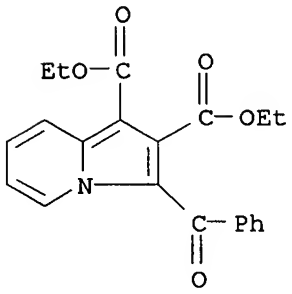

RN 25627-81-0 CAPLUS
CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



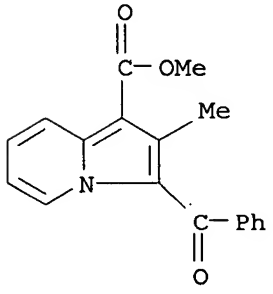
RN 25627-86-5 CAPLUS
CN 1-Indolizinecarboxamide, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



RN 154224-58-5 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, diethyl ester (9CI) (CA INDEX NAME)



RN 154224-59-6 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

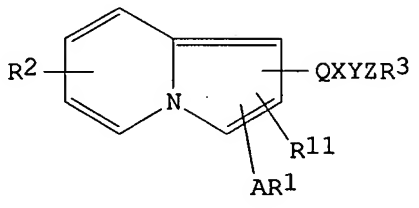


L4 ANSWER 31 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:212886 CAPLUS
DOCUMENT NUMBER: 118:212886
TITLE: Preparation of indolizine derivatives as testosterone 5α-reductase inhibitors
INVENTOR(S): Okada, Satoshi; Sawada, Kozo; Kuroda, Akio; Watanabe, Shinya; Tanaka, Hirokazu
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 64 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

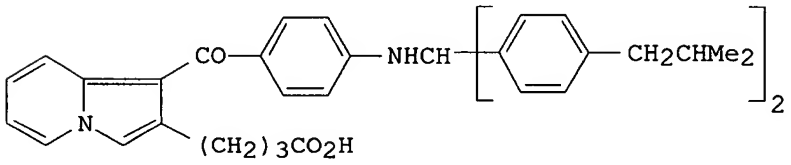
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 519353 | A2 | 19921223 | EP 1992-109968 | 19920613 |
| EP 519353 | A3 | 19930414 | | |
| EP 519353 | B1 | 20000816 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE | | | | |
| ZA 9203958 | A | 19930224 | ZA 1992-3958 | 19920529 |
| US 5334716 | A | 19940802 | US 1992-892453 | 19920602 |
| AT 195521 | T | 20000915 | AT 1992-109968 | 19920613 |
| ES 2149160 | T3 | 20001101 | ES 1992-109968 | 19920613 |
| PT 519353 | T | 20001229 | PT 1992-109968 | 19920613 |
| HU 61544 | A2 | 19930128 | HU 1992-1993 | 19920615 |
| CA 2071375 | A1 | 19921218 | CA 1992-2071375 | 19920616 |
| CA 2071375 | C | 20030211 | | |
| AU 9218270 | A | 19921224 | AU 1992-18270 | 19920616 |
| AU 656197 | B2 | 19950127 | | |
| CN 1067893 | A | 19930113 | CN 1992-104790 | 19920616 |
| CN 1042226 | B | 19990224 | | |
| JP 05178856 | A | 19930720 | JP 1992-157074 | 19920616 |
| RU 2120942 | C1 | 19981027 | RU 1992-5011971 | 19920616 |
| HU 9500394 | A3 | 19950928 | HU 1995-394 | 19950622 |
| GR 3034429 | T3 | 20001229 | GR 2000-402118 | 20000918 |

PRIORITY APPLN. INFO.:
GB 1991-13027 A 19910617
GB 1991-20764 A 19910930
GB 1991-24345 A 19911115
GB 1992-3809 A 19920221

OTHER SOURCE(S): MARPAT 118:212886
GI




I



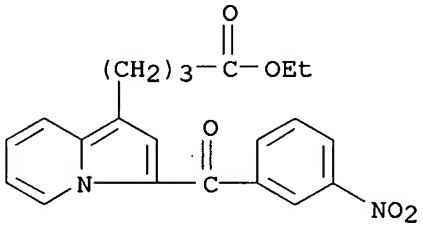

II

AB Title compds. I [R1 = HO2C, protected-HO2C; R2 = H, alkyl, halo; R3 =

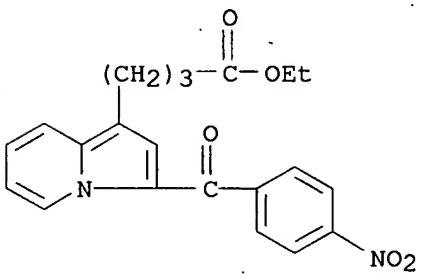
(substituted) aryl, aralkyl, -carbamoylalkyl, N-heterocyclyl, etc.; R11 = H, alkyl, A = (substituted) alkylene, alkenylene; Q = CO, alkylene; X = (substituted) Ph, furandiyl; Y = bond, alkylene; Z = alkylene, alkenylene, O, R6N wherein R6 = H, (substituted) alkyl, -aralkyl, protecting group] and their salts are prepared To Et 4-[1-(4-aminobenzoyl)indolizin-3-yl]butyrate (preparation given) in CH2Cl2 were added diisopropylethylamine and bis(4-isobutylphenyl)chlormethane in CH2Cl2 to give Et 4-[1-[4-[bis(4-isobutylphenyl)methylamino]benzoyl]indolizin-3-yl]butyrate to which was added 4N NaOH to give title compound II. II showed IC50 of 4.4 + 10-10 M against testosterone 5α-reductase.

IT 146922-53-4P 146922-54-5P 146922-57-8P
146922-58-9P 146922-61-4P 146922-62-5P
146922-65-8P 146922-66-9P 146922-75-0P
146922-76-1P 146922-79-4P 146922-80-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for testosterone reductase inhibitors)

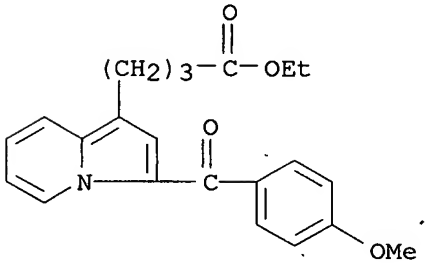
RN 146922-53-4 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



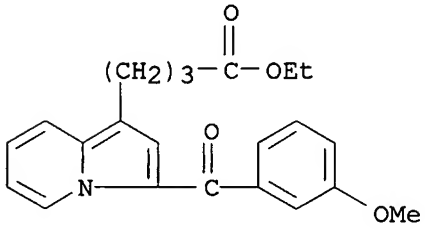
RN 146922-54-5 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(4-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



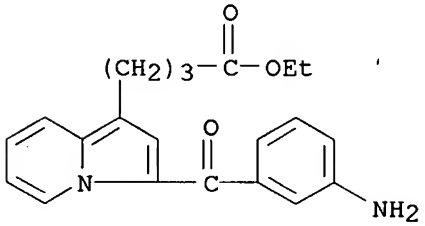
RN 146922-57-8 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(4-methoxybenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



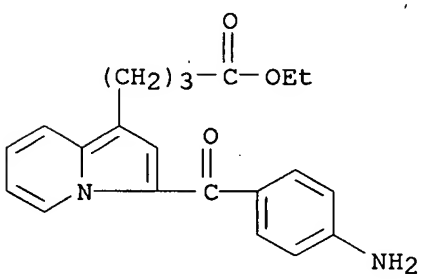
RN 146922-58-9 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-methoxybenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



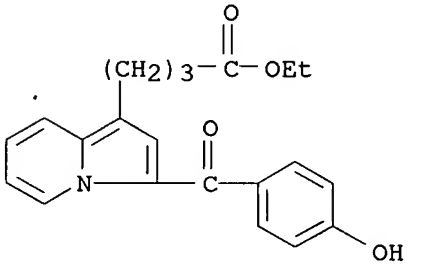
RN 146922-61-4 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-aminobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



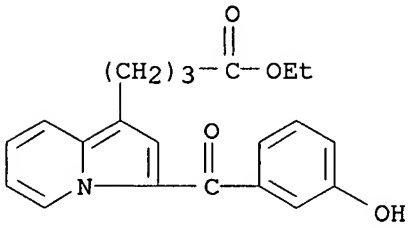
RN 146922-62-5 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(4-aminobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



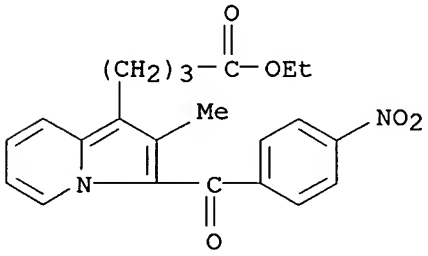
RN 146922-65-8 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(4-hydroxybenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



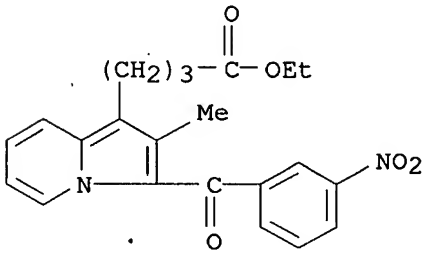
RN 146922-66-9 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-hydroxybenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



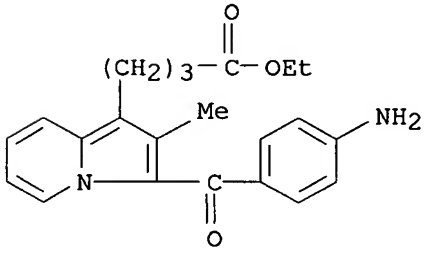
RN 146922-75-0 CAPLUS
CN 1-Indolizinebutanoic acid, 2-methyl-3-(4-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



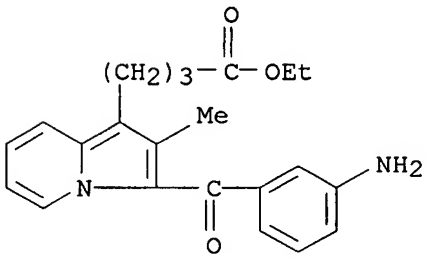
RN 146922-76-1 CAPLUS
CN 1-Indolizinebutanoic acid, 2-methyl-3-(3-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 146922-79-4 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(4-aminobenzoyl)-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

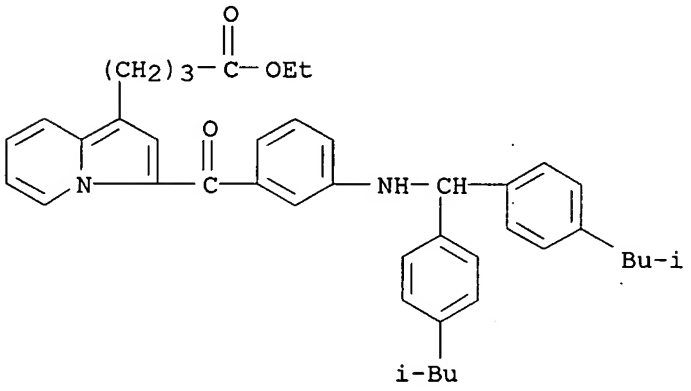


RN 146922-80-7 CAPLUS
CN 1-Indolizinebutanoic acid, 3-(3-aminobenzoyl)-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

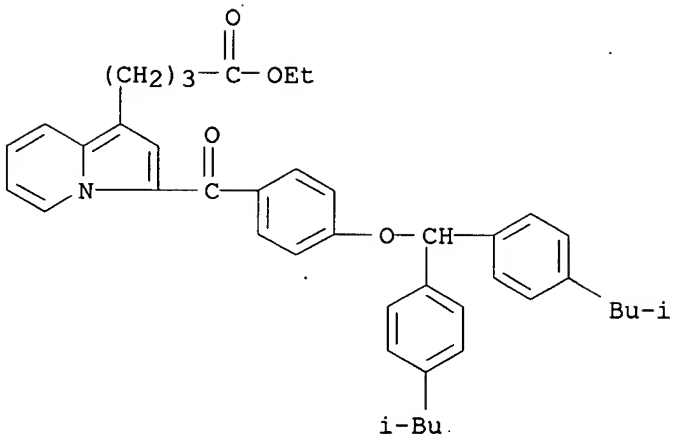


IT 146923-35-5P 146923-40-2P 146923-41-3P
146939-30-2P 146939-35-7P 146939-36-8P
146939-37-9P 146939-38-0P 146939-42-6P
146939-48-2P 146939-50-6P 146939-56-2P
146939-59-5P 146939-60-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as testosterone reductase inhibitor)

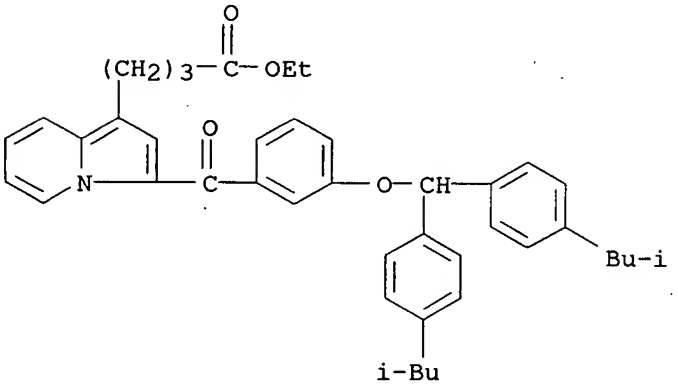
RN 146923-35-5 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[bis[4-(2-methylpropyl)phenyl]methyl]amino]benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)



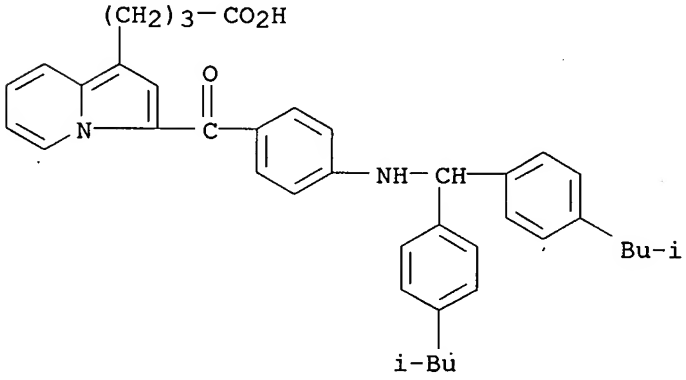
RN 146923-40-2 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[bis[4-(2-methylpropyl)phenyl]methoxy]benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)



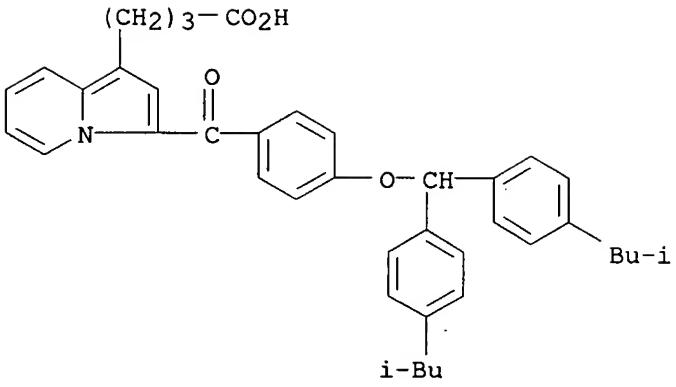

RN 146923-41-3 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[bis[4-(2-methylpropyl)phenyl]methoxy]benz oyl]-, ethyl ester (9CI) (CA INDEX NAME)



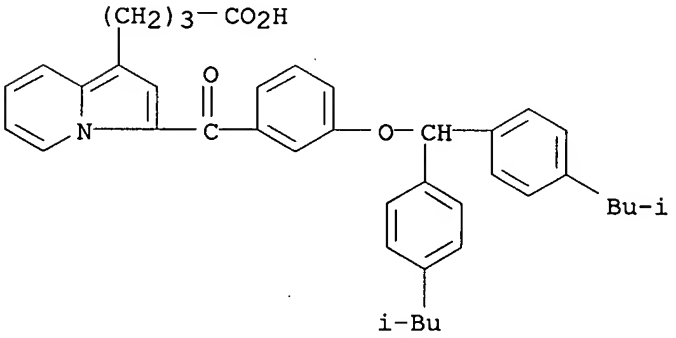

RN 146939-30-2 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[[bis[4-(2-methylpropyl)phenyl]methyl]amin o]benzoyl]- (9CI) (CA INDEX NAME)



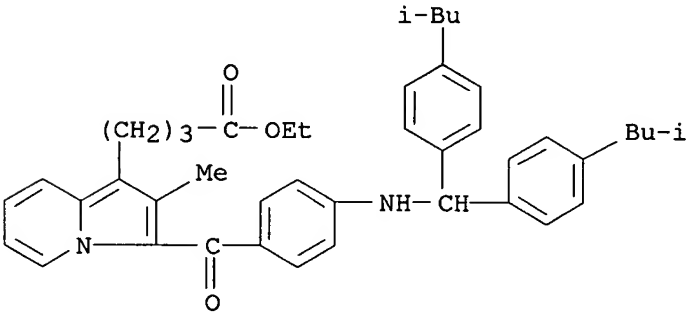

RN 146939-35-7 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[bis[4-(2-methylpropyl)phenyl]methoxy]benz oyl]- (9CI) (CA INDEX NAME)



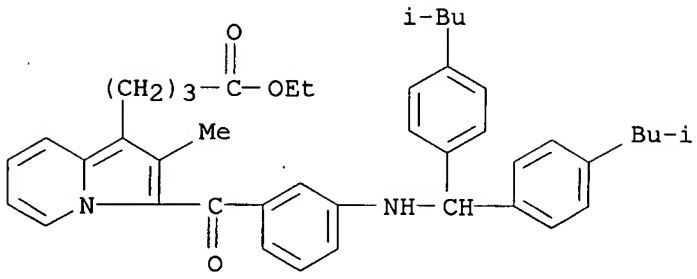
RN 146939-36-8 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[bis[4-(2-methylpropyl)phenyl]methoxy]benz oyl]- (9CI) (CA INDEX NAME)



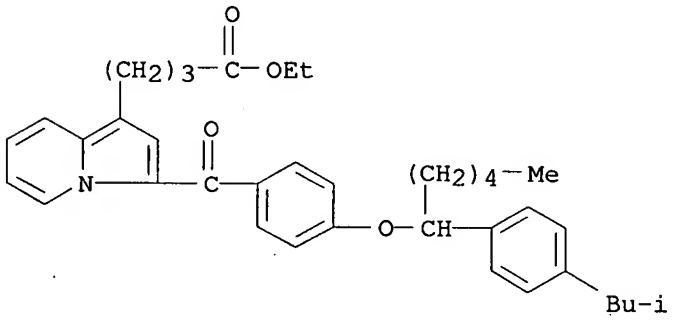
RN 146939-37-9 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[[bis[4-(2-methylpropyl)phenyl]methyl]amin o]benzoyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



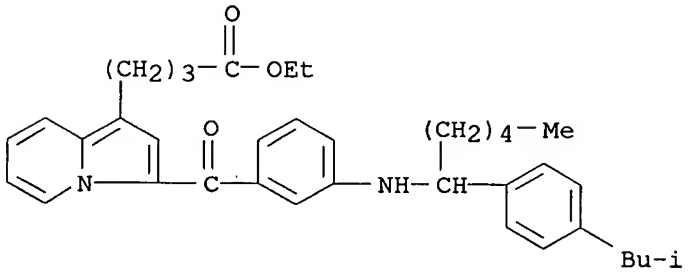
RN 146939-38-0 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[bis[4-(2-methylpropyl)phenyl]methyl]amin o]benzoyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



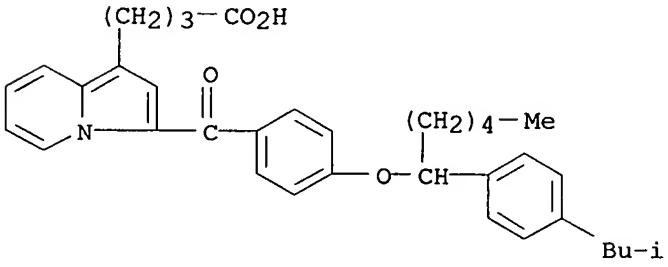
RN 146939-42-6 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[[1-[4-(2-methylpropyl)phenyl]hexyl]oxy]benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)



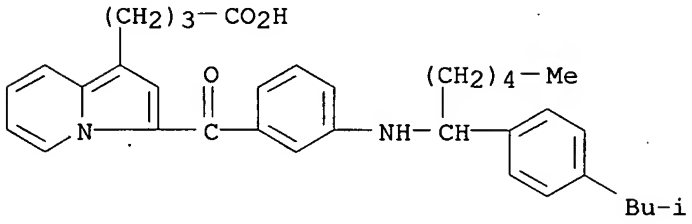
RN 146939-48-2 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[1-[4-(2-methylpropyl)phenyl]hexyl]amino]benzoyl]-, ethyl ester (9CI) (CA INDEX NAME)



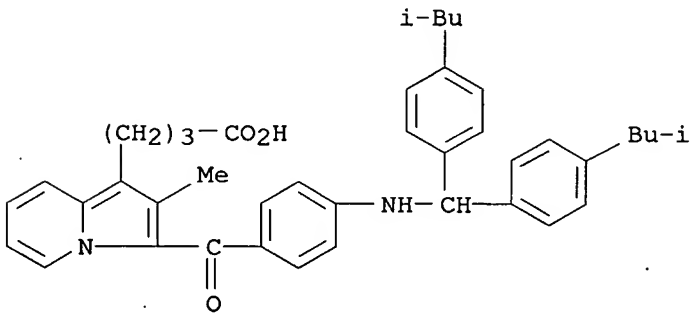
RN 146939-50-6 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[[1-[4-(2-methylpropyl)phenyl]hexyl]oxy]benzoyl]- (9CI) (CA INDEX NAME)



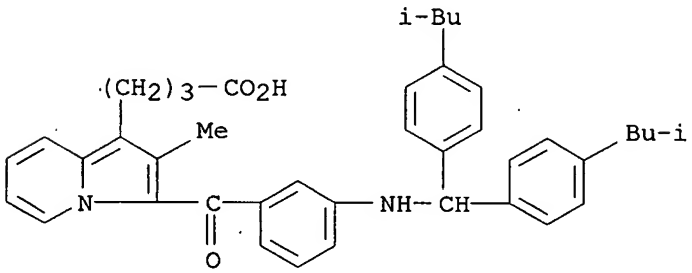
RN 146939-56-2 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[1-[4-(2-methylpropyl)phenyl]hexyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 146939-59-5 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[4-[[bis[4-(2-methylpropyl)phenyl]methyl]amino]benzoyl]-2-methyl- (9CI) (CA INDEX NAME)



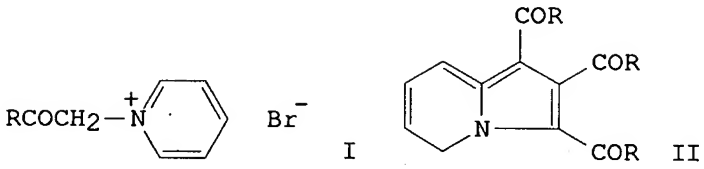
RN 146939-60-8 CAPLUS
CN 1-Indolizinebutanoic acid, 3-[3-[[bis[4-(2-methylpropyl)phenyl]methyl]amino]benzoyl]-2-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 32 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

| | |
|---|---|
| ACCESSION NUMBER: | 1992:591622 CAPLUS |
| DOCUMENT NUMBER: | 117:191622 |
| TITLE: | A facile preparation of 1,2,3-triaroylindolizines |
| AUTHOR(S): | Wei, Xudong; Hu, Yuefei; Li, Tingsheng; Hu, Hongwen |
| CORPORATE SOURCE: | Dep. Chem., Nanjing Univ., Nanjing, 210008, Peop. Rep. China |
| SOURCE: | Synthetic Communications (1992), 22(14), 2103-9<br>CODEN: SYNCAV; ISSN: 0039-7911 |
| DOCUMENT TYPE: | Journal |
| LANGUAGE: | English |

OTHER SOURCE(S): CASREACT 117:191622
GI



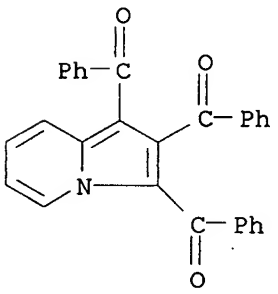
I II

AB Fourteen 1,2,3-triaroylindolizines were prepared conveniently by oxidation of corresponding N-phenacyl pyridinium or substituted pyridinium bromides with a versatile oxidant TPCD [ tetrakis-pyridino-cobalt (II) dichromate] in 12-42% yields. Thus, oxidation of pyridinium salts I (R = Ph, substituted Ph, 2-naphthyl) gave indolizines II.

IT 17281-90-2P 143718-60-9P 143718-62-1P
143718-66-5P 143718-67-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

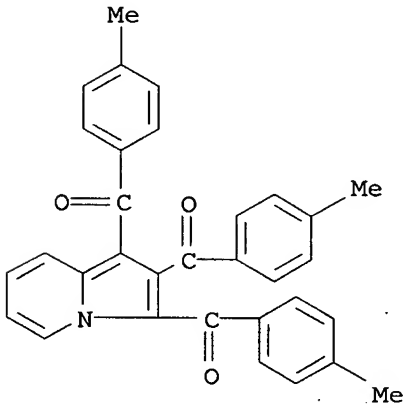
RN 17281-90-2 CAPLUS

CN Methanone, 1,2,3-indolizinetriyltris[phenyl- (9CI) (CA INDEX NAME)



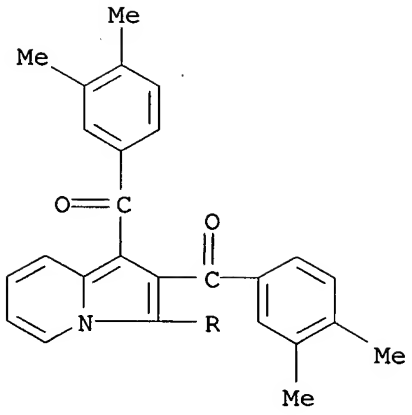
RN 143718-60-9 CAPLUS

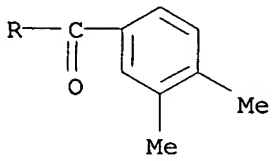
CN Methanone, 1,2,3-indolizinetriyltris[(4-methylphenyl)- (9CI) (CA INDEX NAME)



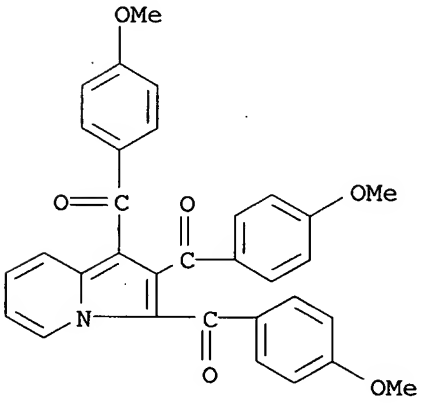
RN 143718-62-1 CAPLUS

CN Methanone, 1,2,3-indolizinetriyltris[(3,4-dimethylphenyl)- (9CI) (CA INDEX NAME)

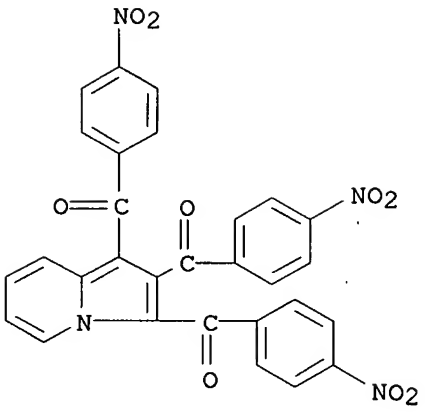




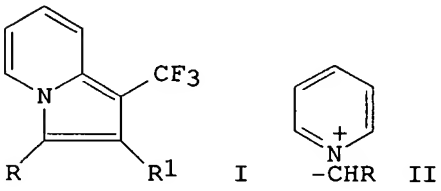
RN 143718-66-5 CAPLUS
CN Methanone, 1,2,3-indolizinetriyltris[(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 143718-67-6 CAPLUS
CN Methanone, 1,2,3-indolizinetriyltris[(4-nitrophenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 33 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:491996 CAPLUS
DOCUMENT NUMBER: 115:91996
TITLE: Fluorocarbon derivatives of nitrogen. Part 18. Synthesis of fluorinated indolizines through reactions of pyridinium ethoxycarbonylmethylide or pyridinium phenacylide with perfluoropropene, perfluorobut-2-yne and 3,3,3-trifluoropropyne
AUTHOR(S): Banks, Ronald Eric; Khaffaff, Suad Najmaldin
CORPORATE SOURCE: Inst. Sci. Technol., Univ. Manchester, Manchester, M60 1QD, UK
SOURCE: Journal of Fluorine Chemistry (1991), 51(3), 407-18
CODEN: JFLCAR; ISSN: 0022-1139
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:91996
GI

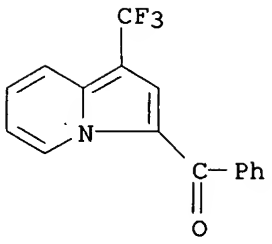


I

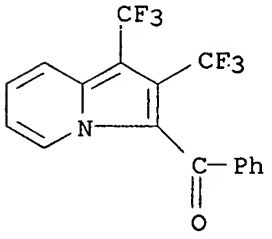


II

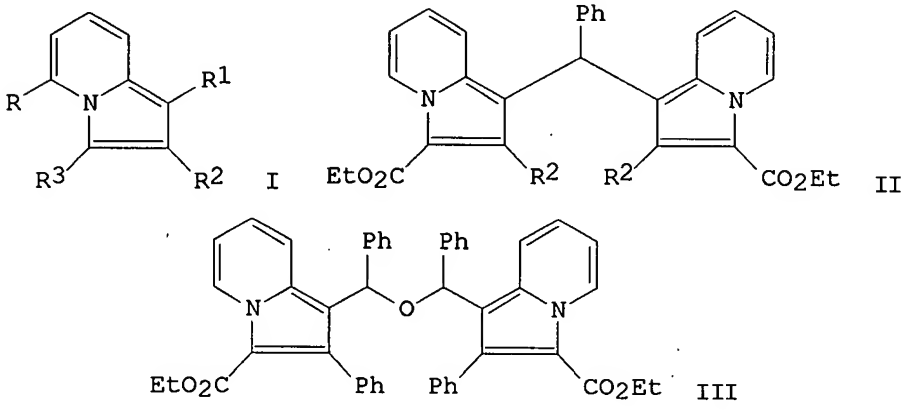
AB Fluorinated indolizines I (R = CO2Et, COPh; R1 = F, CF3, H) were prepared by reaction of pyridinium methylides II, generated from N-[(ethoxycarbonyl)methyl]pyridinium bromide or N-phenacylpyridinium iodide and NaH, with CF2:CFCH3, CF3C.tplbond.CCF2CF3 and HC.tplbond.CCF3.
IT 135339-04-7P 135339-07-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 135339-04-7 CAPLUS
CN Methanone, phenyl[1-(trifluoromethyl)-3-indolizinyl]- (9CI) (CA INDEX NAME)



RN 135339-07-0 CAPLUS
CN Methanone, [1,2-bis(trifluoromethyl)-3-indolizinyl]phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 34 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:206937 CAPLUS
DOCUMENT NUMBER: 114:206937
TITLE: Acid-catalyzed reactions of 1- and 3-(α-hydroxybenzyl)indolizines
AUTHOR(S): Miki, Yasuyoshi; Hiroishi, Yuji; Hachiken, Hiroko; Takemura, Shoji
CORPORATE SOURCE: Fac. Pharm. Sci., Kinki Univ., Higashi-Osaka, 577, Japan
SOURCE: Journal of Heterocyclic Chemistry (1991), 28(1), 45-8
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:206937
GI



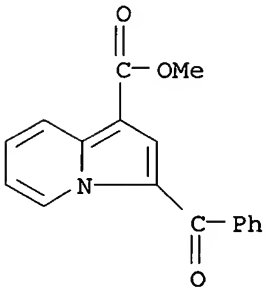
AB Treatment of 1- and 3-(α-hydroxybenzyl)indolizines I [R = H, R1 = CH(OH)Ph, R2 = H, Ph, R3 = CO2Et; R = H, Me, R1 = CO2Me, R2 = H, Ph, R3 =

CH(OH)Ph] with trifluoroacetic acid in dichloromethane gave phenylbis(α-indolizinyl)methanes, bis[α-(indolizinyl)benzyl] ethers and indolizines, depending upon the presence or absence of the substituent at the 2- or 5-position and the reaction conditions used. Thus, treating I [R = H, R1 = CH(OH)Ph, R2 = Ph, R3 = CO2Et] with CF3CO2H gave phenylbis(indolizinyl)methane II and the bis[lindolizinyl)benzyl] ether III. I [R = R2 = H, R1 = CH(OH)Ph, R3 = CO2Et] gave only II (R2 = H).

IT 17281-79-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)

RN 17281-79-7 CAPLUS

CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)




L4 ANSWER 35 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:213700 CAPLUS

DOCUMENT NUMBER: 106:213700

TITLE: The synthesis of indolizines: the reaction of α-halo pyridinium salts with β-dicarbonyl species

AUTHOR(S): Nugent, Richard A.; Murphy, Megan

CORPORATE SOURCE: Upjohn Co., Kalamazoo, MI, 49001, USA

SOURCE: Journal of Organic Chemistry (1987), 52(11), 2206-8
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

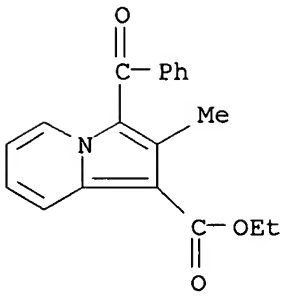
OTHER SOURCE(S): CASREACT 106:213700

AB The reaction of β-keto esters and β-diketones with readily accessible 2-halopyridinium salts in the presence of DBU serves as a rapid and convenient method for the synthesis of substituted indolizines. The use of di-Et malonate as the dicarbonyl component of the reaction enables the preparation of previously undescribed 2-hydroxyindolizines.

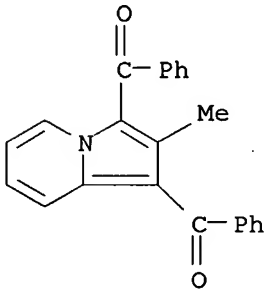
IT 107846-98-0P 107847-02-9P 107847-06-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 107846-98-0 CAPLUS

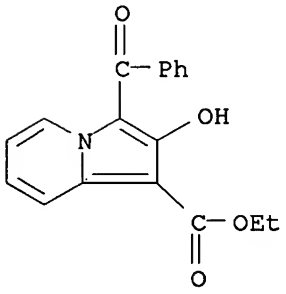
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



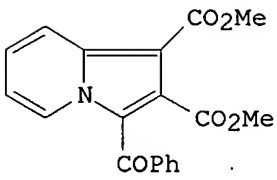
RN 107847-02-9 CAPLUS
CN Methanone, (2-methyl-1,3-indolizinediyl)bis[phenyl- (9CI) (CA INDEX NAME)



RN 107847-06-3 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-2-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 36 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:424147 CAPLUS
DOCUMENT NUMBER: 105:24147
TITLE: Phase-transfer catalysis of dipolar species. 1,3-Dipolar cycloadditions of pyridinium ylides in a liquid-liquid biphasic system
AUTHOR(S): Gandasegui, M. Teresa; Alvarez-Builla, Julio
CORPORATE SOURCE: Dep. Quim. Org., Univ. Alcala Henares, Madrid, Spain
SOURCE: Journal of Chemical Research, Synopses (1986), (2), 74-5
CODEN: JRPSDC; ISSN: 0308-2342
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 105:24147
GI



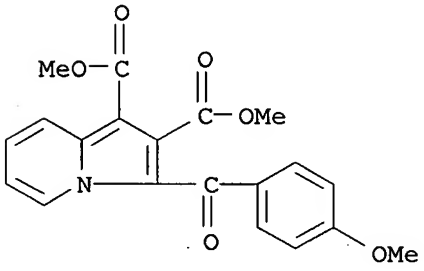

I

AB Pyridinium salts underwent cycloaddn. reactions with alkynoate esters under liquid-liquid phase-transfer-catalyzed conditions to give the corresponding indolizines. E.g., N-phenacylpyridinium bromide and (MeO2CC.tplbond.)2 were stirred for 8 h at room temperature with CH2Cl2 and 50% aqueous K2CO3 in the presence of Bu4NBr to give 76% indolizine I: the yield increased to 82% with ultrasound irradiation

IT 102767-47-5P 102767-53-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

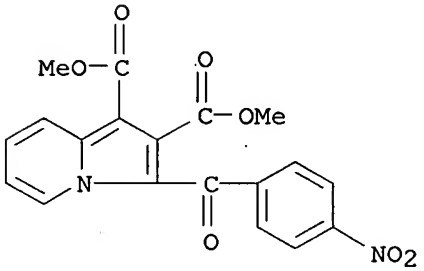
RN 102767-47-5 CAPLUS

CN 1,2-Indolizinedicarboxylic acid, 3-(4-methoxybenzoyl)-, dimethyl ester (9CI) (CA INDEX NAME)




RN 102767-53-3 CAPLUS

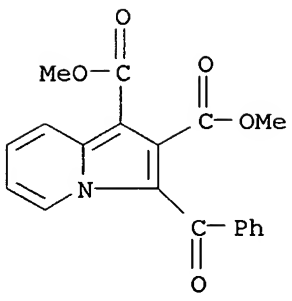
CN 1,2-Indolizinedicarboxylic acid, 3-(4-nitrobenzoyl)-, dimethyl ester (9CI) (CA INDEX NAME)



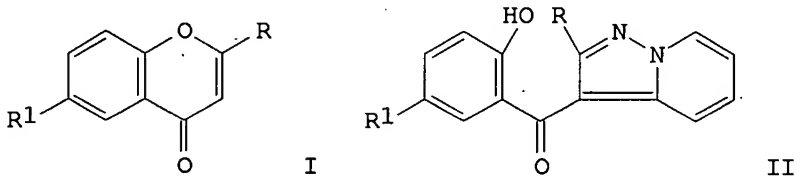

IT 17281-78-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by phase transfer-catalyzed reaction)

RN 17281-78-6 CAPLUS

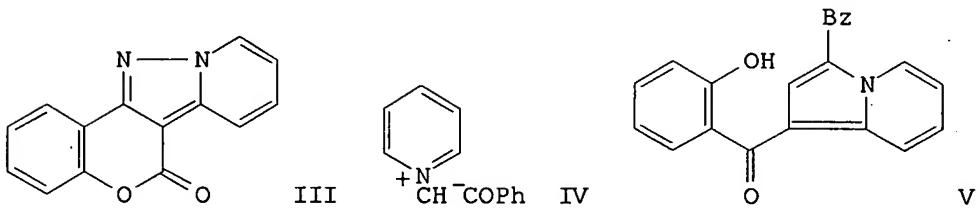
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 37 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:88475 CAPLUS
DOCUMENT NUMBER: 104:88475
TITLE: 1,3-Dipolar cycloaddition reaction of chromones and coumarin with pyridinium ylides
AUTHOR(S): Yokoe, Ichiro; Matsumoto, Shunsuke; Shirataki, Yoshiaki; Komatsu, Manki
CORPORATE SOURCE: Fac. Pharm. Sci., Josai Univ., Sakado, 350-02, Japan
SOURCE: Heterocycles (1985), 23(6), 1395-8
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:88475
GI



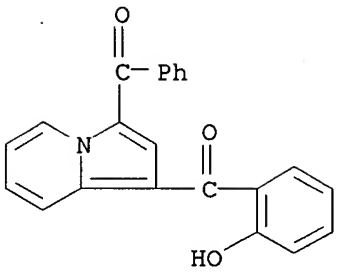
I II



III IV V

AB Cyclocondensation of N-aminopyridinium iodide with chromones I (R = H, Me, Ph; R1 = H, Cl, Me) in DMF containing K2CO3 at room temperature for 4 days gave 18.1-51.4% pyrazolopyridones II. Similar reaction of coumarin gave benzopyranopyrazolopyridine III, and cyclization of the phenacylide IV with I (R = R1 = H) gave indolizine V.

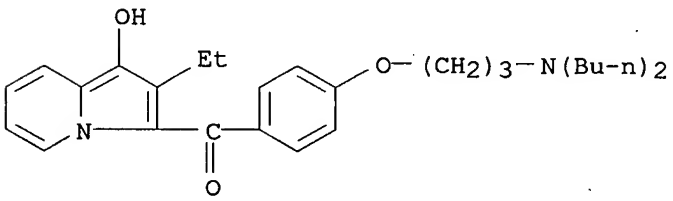
IT 100421-20-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 100421-20-3 CAPLUS
CN Methanone, (3-benzoyl-1-indolizinyl)(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 38 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:55576 CAPLUS
DOCUMENT NUMBER: 102:55576
TITLE: Strategies for drug metabolic profiling in human bile after administration of non-radioactive butoprozine
AUTHOR(S): Overzet, F.; De Zeeuw, R. A.
CORPORATE SOURCE: Dep. Toxicol., State Univ., Groningen, 9713 AW, Neth.
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1984), 2(1), 3-17
CODEN: JPBADA; ISSN: 0731-7085
DOCUMENT TYPE: Journal
LANGUAGE: English

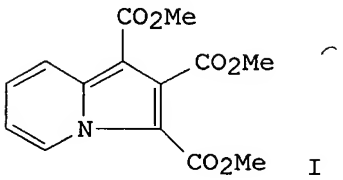
AB A systematic approach to the recognition, isolation and identification of metabolites of butoprozine [62228-20-0] in human bile is described as an example of the general approach in this area. Human profiles are compared with those obtained after administration of 14C-labeled drug to the dog. The screening method is based on gradient-elution HPLC. Isolation is by isocratic reversed-phase HPLC and the identification procedure is performed using UV, mass, and NMR spectroscopy. The main metabolite excreted in human bile was tentatively identified as 1-hydroxybutoprozine [94419-24-6].

IT 94419-24-6
RL: BIOL (Biological study)
(as butoprozine biliary metabolite, nonradioactive spectroscopic methods in study of, in humans)
RN 94419-24-6 CAPLUS
CN Methanone, [4-[3-(dibutylamino)propoxy]phenyl](2-ethyl-1-hydroxy-3-indolizinyl)- (9CI) (CA INDEX NAME)



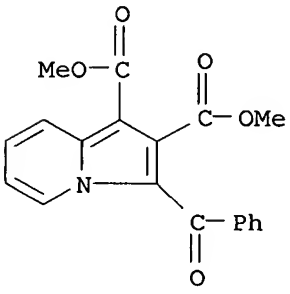
L4 ANSWER 39 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:591612 CAPLUS
DOCUMENT NUMBER: 101:191612
TITLE: Use of dipolar species under phase-transfer catalysis. Part 1. 1,3-Dipolar cycloaddition in a two-phase system
AUTHOR(S): Alvarez-Builla, Julio; Quintanilla, M. Gloria; Abril, Catalina; Gandasegui, M. Teresa
CORPORATE SOURCE: Dep. Quim. Org., Univ. Alcala de Henares, Madrid, Spain

SOURCE: Journal of Chemical Research, Synopses (1984), (6), 202-3
CODEN: JRPSDC; ISSN: 0308-2342
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

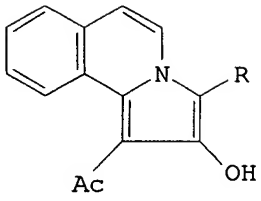


I

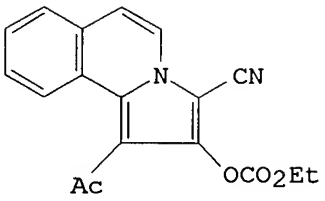
AB Eleven indolizines were prepared in 18-82% yield by 1,3-dipolar cycloaddn. of pyridinium ylides with RC.tplbond.CCO2Me (R = MeO2C, Ph) in a 2-phase system. Addition of MeO2CC.tplbond.CCO2Me to N-(methoxycarbonylmethyl)pyridinium chloride and KOH, supported on alumina (1:1) suspended in MeCN, at room temperature for >18 h, followed by dehydrogenation with 5% Pd-C at reflux for 4 h gave 44% indolizine I. Phase-transfer catalysts did not significantly improve the yields.
IT 17281-78-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by cycloaddn. reaction of pyridinium ylide with acetylenic ester, in two-phase system)
RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



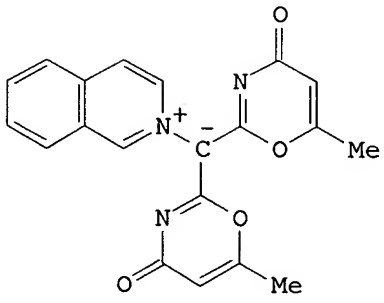

L4 ANSWER 40 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:197976 CAPLUS
DOCUMENT NUMBER: 98:197976
TITLE: Reaction of 2,2,6-trimethyl-1,3-dioxin-4-one with isoquinolinium and pyridinium ylides
AUTHOR(S): Sato, Masayuki; Kanuma, Norio; Kato, Tetsuzo
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Aobayama, 980, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1982), 30(12), 4359-64
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 98:197976
GI




II




III



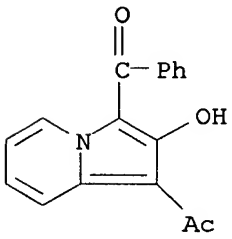

IV

AB The reactions of diketene-acetone adduct [2,2,6-trimethyl-1,3-dioxin-4-one (I)] with heterocyclic ylides were studied. Heating I with isoquinolinium bis(ethoxycarbonyl)methylide gave pyrroloisoquinoline II (R = CO2Et). Similarly, isoquinolinium cyano(ethoxycarbonyl)methylide and phenacylide gave pyrroloisoquinolinecarbonitrile III and II (R = Bz), resp. Isoquinolinium dicyanomethylide reacted with I to give bis(methyloxooxazinyl)methylide IV. Pyridinium ylides similarly reacted with I to give indolizines and oxazinylmethylides.

IT 85574-80-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 85574-80-7 CAPLUS

CN Ethanone, 1-(3-benzoyl-2-hydroxy-1-indolizinyl)- (9CI) (CA INDEX NAME)




L4 ANSWER 41 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:620542 CAPLUS

DOCUMENT NUMBER: 93:220542

TITLE: Reaction of 2- and 4-vinylpyridines with phenacylpyridinium ylides

AUTHOR(S): Terent'ev, P. B.; Vinogradova, S. M.; Kost, A. N.

CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1980), (5), 651-6
CODEN: KGSSAQ; ISSN: 0453-8234

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 93:220542

GI

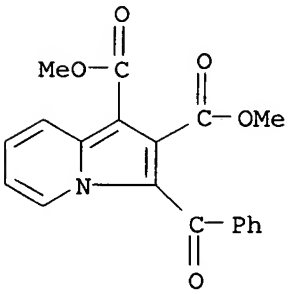
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Treatment of ylides I (R1 = R2 = H; R1 = NO2, R2 = H, CO2Et; R1 = H, R2 = CO2Et, Br, Me) with 2- or 4-vinylpyridine gave 5-29% indolizines II (R = 2- or 4- pyridyl). I and MeO2CC:CCO2Me gave a mixture of III and IV. An anomalous reaction occurred between 2-bromo-1-phenacylpyridinium ylide and MeO2CC:CCO2Me; in addition to 5-bromo-1,2-dicarbomethoxy-3-benzoylendolizine (V), VI was obtained. V was converted to VI by treatment with Al2O3.

IT 17281-78-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 17281-78-6 CAPLUS

CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)




L4 ANSWER 42 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:422994 CAPLUS

DOCUMENT NUMBER: 87:22994

TITLE: Investigations on 2-chloropyridinium salts, III. Reactions with CH-acidic compounds and cyclization to indolizines .

AUTHOR(S): Pauls, Hartmut; Kroehnke, Fritz

CORPORATE SOURCE: Inst. Org. Chem., Univ. Giessen, Giessen, Fed. Rep. Ger.

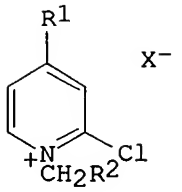
SOURCE: Chemische Berichte (1977), 110(4), 1294-303
CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

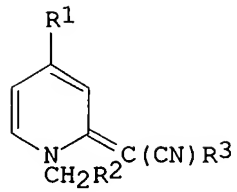
LANGUAGE: German

OTHER SOURCE(S): CASREACT 87:22994

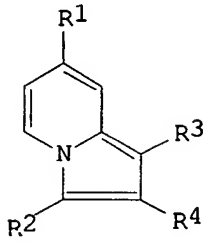
GI



I



II



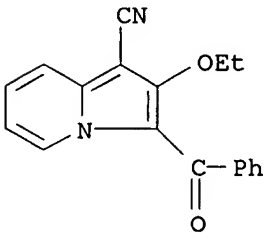
III, $R^4=NH_2$
IV, $R^4=R^5$

AB Pyridinium salts I (R1 = H, R2 = 4-MeC6H4CO, 4-BrC6H4CO, Bz, H, Ac; R1 = Me, R2 = Bz, Ac) reacted with nitriles R3CH2CN (R3 = cyano, CO2Et) in PrOH containing (Me2CH)2NEt in 2 h at 80° or 6 h at room temperature to give 35-95% resp. pyridines II which cyclized to 40-92% resp. indolizines III. Heating II (R1 = H, R2 = Ac, Bz, 4-MeC6H4CO, R1 = Me, R2 = Bz, R3 = cyano) with concentrated HCl or II (R1 = H, R2 = Bz, 4-MeC6H4CO, 4-BrC6H4CO, R1 = Me, R2 = Ac, R3 = CO2Et) with 2NHCl at 100° cleaved CO2 to give pyridines IV (R1 = R2 = H, R3 = cyano, R5 = 4-MeC6H4, Me; R1 = Me, R2 = H, R3 = cyano, R5 = Ph).

IT 63014-86-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 63014-86-8 CAPLUS

CN 1-Indolizinecarbonitrile, 3-benzoyl-2-ethoxy- (9CI) (CA INDEX NAME)



L4 ANSWER 43 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:89516 CAPLUS

DOCUMENT NUMBER: 86:89516

TITLE: Addition reactions of heterocyclic compounds. Part LXIV. Indolizines from reactions of hex-3-yne-2,5-dione, but-3-yn-2-one, and allenecarboxylic esters with some nitrogen-containing heterocyclic ylides

AUTHOR(S): Acheson, R. Morrin; Bite, Maris G.; Cooper, Martin W.

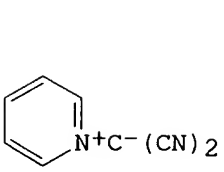
CORPORATE SOURCE: Dep. Biochem., Univ. Oxford, Oxford, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1976), (18), 1908-11
CODEN: JCPRB4; ISSN: 0300-922X

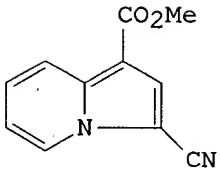
DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I



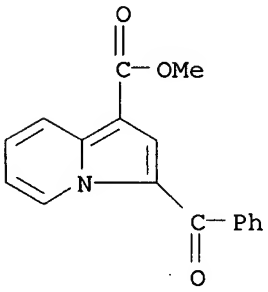
II

AB Pyridinium methylides with MeCOC.tplbond.CCOMe, HC.tplbond.CCO2Me, HC.tplbond.CCOMe, PhC.tplbond.CCO2Me, MeO2CCH:C:CHCO2Me, CH2:C:CMeCO2Et, and MeCH:C:CMeCO2Et gave indolizines. E.g., I with HC.tplbond.CCO2Me in refluxing PhMe for 1 hr gave 18% indolizine II.

IT 17281-79-7P 51386-41-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

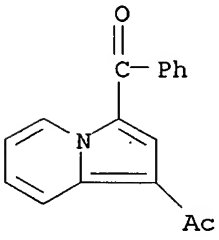
RN 17281-79-7 CAPLUS

CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



RN 51386-41-5 CAPLUS

CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 44 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:540719 CAPLUS

DOCUMENT NUMBER: 83:140719

TITLE: Mass-spectral study of indolizine derivatives

AUTHOR(S): Terent'ev, P. B.; Vinogradova, S. M.; Kost, A. N.

CORPORATE SOURCE: Mosk. Gos. Univ. im. Lomonosova, Moscow, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1975), (4), 509-13
CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal

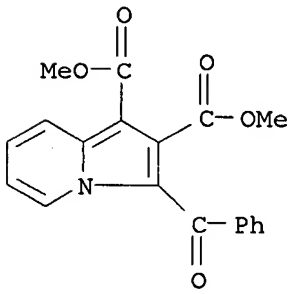
LANGUAGE: Russian

AB Dissociative ionization of substituted 3-aroylindolizine takes place with

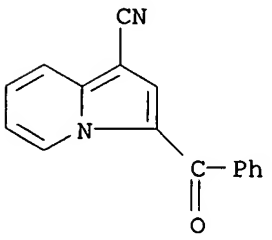
a subsequent loss of the aryl fragment, and then CO. Simultaneously there is fragmentation of OH and CHO groups. A comparison of the stability of these compds. with indole analogs was made.

IT 17281-78-6 25627-81-0
RL: PRP (Properties)
(mass spectrum of)

RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 25627-81-0 CAPLUS
CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



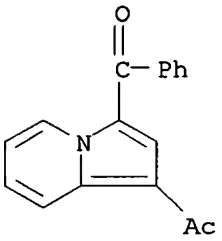
L4 ANSWER 45 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:36969 CAPLUS
DOCUMENT NUMBER: 80:36969
TITLE: Synthesis and thermal reaction of pyridinium 3,3-diacyl-1-benzoylallylides[3,3-diacyl-1-benzoyl-1-(1-pyridinio)prop-2-enides]. Formation of indolizine derivatives
AUTHOR(S): Tamura, Yasumitsu; Sumida, Yoshio; Ikeda, Masazumi
CORPORATE SOURCE: Fac. Pharm. Sci., Osaka Univ., Osaka, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1973), (19), 2091-5
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English

GI For diagram(s), see printed CA Issue.

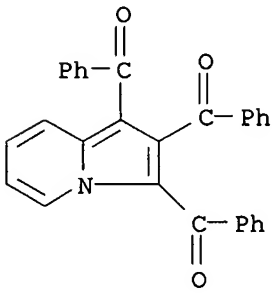
AB Pyridinium phenacylides with 2,2-diacyl-1-ethoxyethylenes gave pyridinium 3,3-diacyl-1-benzoyl-allylides. E.g. pyridinium phenacylide with EtOCH:C(COMe)2 gave 75% allylide (I, R = H). I (R = H) in refluxing Me2C6H4 gave 6% indolizine (II; R = H, R1 = Bz). 2-Methyl derivs. of I in refluxing Me2C6H4 gave mainly 1-acetyl-2-phenylindolizines. E.g. I (R = Me) gave 30% II (R = Ph, R1 = CH:CHCOMe) and 2% II (R = H, R1 = Bz).

IT 51386-41-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

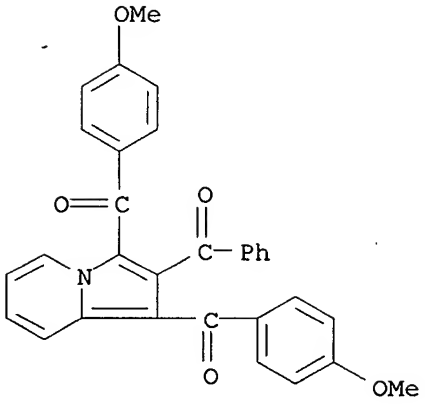
RN 51386-41-5 CAPLUS
CN Ethanone, 1-(3-benzoyl-1-indolizinyl)- (9CI) (CA INDEX NAME)



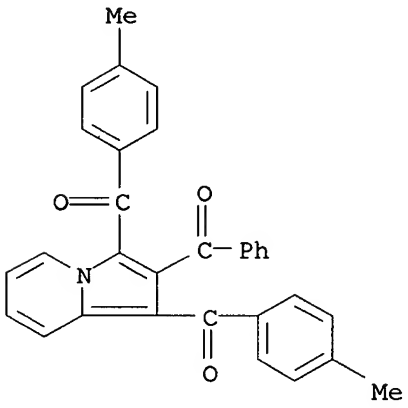
L4 ANSWER 46 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:71825 CAPLUS
DOCUMENT NUMBER: 78:71825
TITLE: Red dihydroindolizines from N-phenacylpyridinium salts
AUTHOR(S): Schuetze, Detlef Ingo; Kroehnke, Fritz
CORPORATE SOURCE: Inst. Org. Chem., Univ. Giessen, Giessen, Fed. Rep. Ger.
SOURCE: Justus Liebigs Annalen der Chemie (1972), 765, 20-8
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB Reaction of p-RC6H4COCH2Z+ Br- (Z+ = pyridinium; R = H, MeO, Me, Br, Ph, or O2N) with p-R1C6H4COCHO (R1 = H or MeO) in alkaline alc. solution in 2:1 molar ratio gave 30-61% indolizines (I). From the mother liquors, 10-30% p-RC6H4COCH2CH(OH)COC6H4R1-p were isolated. I were converted by acids to give p-RC6H4COCH(Z+)C-(COC6H4R1-p):CHCOC6H4R-p X- (II). I were characterized by dehydrogenation and the NMR spectra of II (X = CF3CO2).
IT 17281-90-2P 40240-69-5P 40240-70-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 17281-90-2 CAPLUS
CN Methanone, 1,2,3-indolizinetriyltris[phenyl- (9CI) (CA INDEX NAME)



RN 40240-69-5 CAPLUS
CN Methanone, (2-benzoyl-1,3-indolizinediyl)bis[(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

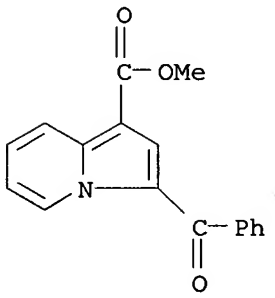



RN 40240-70-8 CAPLUS
CN Methanone, (2-benzoyl-1,3-indolizinediyl)bis[(4-methylphenyl)- (9CI) (CA INDEX NAME)

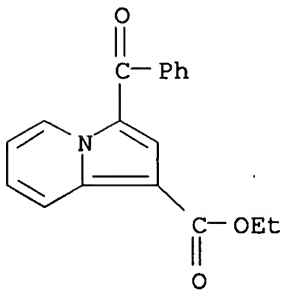



L4 ANSWER 47 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:29578 CAPLUS
DOCUMENT NUMBER: 78:29578
TITLE: Heteroaromaticity. LXIV. Characterization of pyridinium N-allylides
AUTHOR(S): Sasaki, T.; Kanematsu, K.; Kakehi, A.; Ito, G.
CORPORATE SOURCE: Inst. Appl. Org. Chem., Nagoya Univ., Nagoya, Japan
SOURCE: Tetrahedron (1972), 28(19), 4947-58
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 78:29578
GI For diagram(s), see printed CA Issue.
AB Pyridine derivs. reacted with γ-bromocrotonates to give pyridinium N-allylides [e.g. I (R = H)] which reacted together or with acetylenic compds. to give 3-ethenylindolizines; e.g. I (R = H) with K2CO3 in CHCl3 at room temperature with or without HC.tplbond.CCO2Et gave II. I (R = H) with pyridinium N-phenacylide gave the 3-benzoylindolizine (III) indicating the N-allylide to be a 1,3-dipolarophile; I (R = Me) with diphenylcyclopropenone gave Et 3,4-diphenylsalicylate. N-Allylides derived from γ-bromo-β-methylcrotonates cyclized intramol. to give 3-unsubstituted indolizine derivs.; e.g. IV with K2CO3-CHCl3 gave V.
IT 17281-79-7P 40624-43-9P
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)
RN 17281-79-7 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)

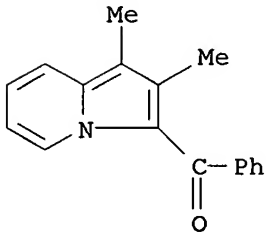


RN 40624-43-9 CAPLUS
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 48 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:434269 CAPLUS
DOCUMENT NUMBER: 77:34269
TITLE: Indolizines. I. Direct synthesis of acylindolizines from substituted pyridinium salts
AUTHOR(S): Dainis, I.
CORPORATE SOURCE: Chem. Sch., Univ. New South Wales, Kensington, Australia
SOURCE: Australian Journal of Chemistry (1972), 25(5), 1003-24
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Several routes to 1-(formylmethyl)-2-methylpyridinium bromide (I) were examined Chichibabin cyclization of I to indolizine failed; an intermol. aldol condensation occurred. Preparation of acyl- and diacylindolizines, e.g., II (R1, R2, R3 = H, Me, Ph) and III (R1, R2 = H, Me, Ph), from 1-(β-oxoalkyl)-2-alkyl- and 1-(β-oxoalkyl)-2-benzylpyridinium salts was described. Using NaOAc-HOAc this reaction gave isomeric products. 1-Acyl-2,3-disubstituted and 3-acyl-1,2-disubstituted indolizines were formed from salts by Chichibabin cyclization and subsequent in situ acylation. 1-Acetonyl-2-methylpyridinium bromide gave good yields of 3-acyl- and 1,3-diacylindolizines by this path and also via 1-acetonyl-2-acetylmethylene-1,2-dihydropyridine. Thermal cyclization of 2-phenylpyridinium diphenacylmethylide gave 3-benzoyl-1,2-diphenylindolizine.
IT 37050-11-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 37050-11-6 CAPLUS
CN Methanone, (1,2-dimethyl-3-indolizinyl)phenyl- (9CI) (CA INDEX NAME)

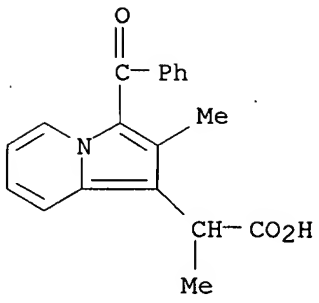



L4 ANSWER 49 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:448933 CAPLUS
DOCUMENT NUMBER: 75:48933
TITLE: Analgesic and antiinflammatory indolizineacetic acids
INVENTOR(S): Brown, Allan Guilford; Nayler, John H. C.
PATENT ASSIGNEE(S): Beecham Group Ltd.
SOURCE: Ger. Offen., 15 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

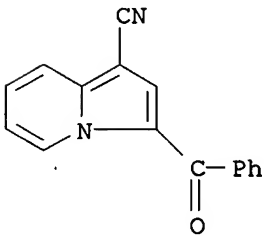
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 2046904 | A | 19710422 | DE 1970-2046904 | 19700923 |
| GB 1268424 | A | 19720329 | GB 1969-48856 | 19691004 |
| NL 7013584 | A | 19710406 | NL 1970-13584 | 19700914 |
| ZA 7006287 | A | 19710630 | ZA 1970-6287 | 19700914 |
| ES 383992 | A1 | 19730901 | ES 1970-383992 | 19700925 |
| AT 295513 | B | 19720110 | AT 1970-8771 | 19700929 |
| FR 2070109 | A1 | 19710910 | FR 1970-35477 | 19701001 |
| FR 2070109 | A5 | 19710910 | | |
| JP 49010517 | B | 19740311 | JP 1970-87040 | 19701003 |
| US 3806513 | A | 19740423 | US 1972-311466 | 19721204 |

PRIORITY APPLN. INFO.: GB 1969-48856 A 19691004
US 1970-74916 A2 19700923

GI For diagram(s), see printed CA Issue.
AB Title compds. are prepared Thus, Ph3P and Et 2-bromopropionate gives [Ph3P+CHMeCO2Et]Br-, which is condensed with 2-formylpyridine in the presence of Na in EtOH to give Et α-methyl-β-(2-pyridyl)acrylate, which is hydrogenated over Pd/C in AcOH to give Et α-methyl-β-(2-pyridyl)propionate. This with bromoacetone in acetone gives α-(2-methylindolizin-1-yl)propionic acid the Et ester of which is acylated with Ac2O or BzCl and the product hydrolyzed to give I (R = Me or Ph).
IT 32999-53-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 32999-53-4 CAPLUS
CN 1-Indolizineacetic acid, 3-benzoyl-α,2-dimethyl- (8CI) (CA INDEX NAME)



L4 ANSWER 50 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:435631 CAPLUS
DOCUMENT NUMBER: 75:35631
TITLE: Indolizines from phenacylcyclimonium salts
AUTHOR(S): Froehlich, Juerg; Kroehnke, Fritz
CORPORATE SOURCE: Inst. Org. Chem., Univ. Giessen, Giessen, Fed. Rep. Ger.
SOURCE: Chemische Berichte (1971), 104(5), 1621-8
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB Dipolar 1,3-addition of H2C:CHCN to N-ylides, generated in situ by bases from N-phenacylcyclimmonium salts (I), e.g. N-phenacylpyridinium bromide gave tetrahydroindolizines (II), e.g. 3-benzoyl-1-cyano-1,2,3,8a-tetrahydroindolizine. II were dehydrogenated to dihydroindolizines (III), e.g. 3-benzoyl-1-cyano-2,3-dihydroindolizine and indolizines (IV), e.g. 3-benzoyl-1-cyanoindolizine.
IT 25627-81-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 25627-81-0 CAPLUS
CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 51 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1970:78938 CAPLUS
DOCUMENT NUMBER: 72:78938
TITLE: Chemistry of cyanoacetylenes. V. 1,3-Dipolar cycloaddition reactions of cyanoacetylenes with N-ylides and N-imines
AUTHOR(S): Sasaki, Tadashi; Kanematsu, Ken; Yukimoto, Yusuke
CORPORATE SOURCE: Fac. Eng., Nagoya Univ., Nagoya, Japan
SOURCE: Journal of the Chemical Society [Section] C: Organic (1970), (3), 481-5
CODEN: JSOOAX; ISSN: 0022-4952
DOCUMENT TYPE: Journal
LANGUAGE: English

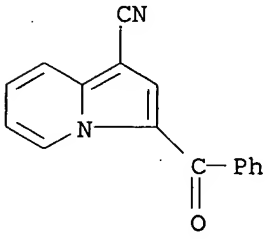
OTHER SOURCE(S): CASREACT 72:78938

AB 1,3-Dipolar cycloaddn. reactions of zwitterionic pyridinium, quinolinium, and isoquinolinium phenacylides with cyanoacetylene or chlorocyanoacetylene gave 1-cyanoindolizine derivs. Similar reactions of N-aminopyridinium and isoquinolinium salts gave 3-cyanopyrazol[1,5-a]pyridine derivs. A 3-methylpyridinium ylide reacted with the same dipolarophiles at the 2-position, in spite of hindrance by the Me group. Reactions of cyclopentadiene ylides with cyanoacetylenes gave trans-2-(2-cyanovinyl)cyclopentadiene ylides.

IT 25627-81-0P 25627-86-5P 25627-87-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

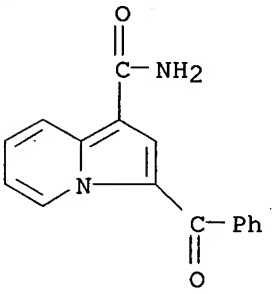
RN 25627-81-0 CAPLUS

CN 1-Indolizinecarbonitrile, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



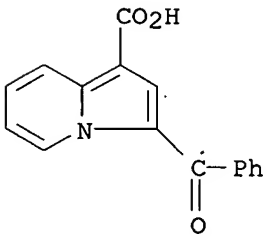
RN 25627-86-5 CAPLUS

CN 1-Indolizinecarboxamide, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



RN 25627-87-6 CAPLUS

CN 1-Indolizinecarboxylic acid, 3-benzoyl- (8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 52 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1970:55285 CAPLUS

DOCUMENT NUMBER: 72:55285

TITLE: Analgesic indolizine-1-acetic acids

INVENTOR(S): Nayler, John H. C.

PATENT ASSIGNEE(S): Beecham Group Ltd.

SOURCE: Brit., 10 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| GB 1174124 | | 19691210 | GB 1967-30271 | 19670630 |

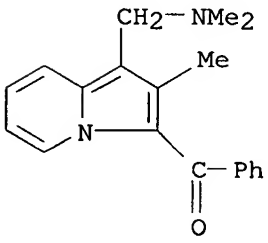
GI For diagram(s), see printed CA Issue.

AB The title compds. (I; R = CO2H) which exhibit analgesic and antiinflammatory activity were prepared 3-p-Chlorobenzoyl-2-methylindolizine (80%), m. 109-10° (light petroleum) was prepared by reacting 2-methylindolizine with p-ClC6H4COCl. 5-Ethoxy-2-methylpyridine (38 g) in 150 ml dry Me2CO refluxed 15 min with 42 g BrCH2Ac gave 6-ethoxy-2-methylindolizine, b0.4 113-14°. 2,4-Lutidine (21.4 g) added to 40 g BzCH2Br in 60 ml dry Me2-CO, the mixture refluxed 30 min and kept overnight at room temperature gave 2,4-dimethyl-1-phenacylpyridinium bromide, m. 228-9°. This (10 g) in 100 ml H2O treated with 30 g NaHCO3 and the mixture refluxed 2 hr gave 97% 7-methyl-2-phenylindolizine, m. 207° (decomposition). A mixture of 31.5 g 2,7-dimethylindolizine and 28 g anhydrous AcONa in 200 ml Ac2O refluxed 7 hr gave 70% 3-acetyl-2,7-dimethylindolizine, b0.15 136-8°, m. 87-8° (light petroleum). Similarly prepared were 83% 3-acetyl-7-methyl-2-phenylindolizine, b0.35 180-2°; 89% 3-acetyl-2-(p-methoxyphenyl)-indolizine, m. 103-5° (EtOH); and 80% 3-acetyl-6-ethoxy-2-methylindolizine, b0.13 138-40°, m. 75° (light petroleum). A mixture of 7.25 ml AcOH and 5 ml H2O cooled to 0°, 3.3 ml anhydrous Me2NH added dropwise followed by 4 ml 40% aqueous HCHO and 12.45 g 3-benzoyl-2-methylindolizine, and the mixture agitated 6.5 hr gave 89% I (R = NMe2, R1 = Me, R2 = Ph, R3 = H) (II), m. 88° (light petroleum). The following I (R = NMe2) were similarly prepared [R1, R2, R3, % yield, and m.p. and (or) b.p. given]: Me, p-ClC6H4, H, 67, 108°, (light petroleum); Me, Me, H, 83, 56° (light petroleum), b1.4 168-9°; Ph, Me , H, 25, 105° (aqueous Me2CO), b1.0 190-2°; Bu, Me, H, 59, b7.0 170-4°; Me, Me, 7-Me, 28, b0.35 167-73°; Ph, Me, 7-Me, 78, 107-8° (light petroleum); p-MeOC6H4, Me, H, 12, b1.0 240-50°; and Me, Me, 6-OEt, 54, 79-80° (light petroleum), b0.3 173-5°). MeI (6 ml) added to 9.75 g II in 100 ml EtOH, followed by 5.5 g KCN in 60 ml H2O, and the mixture refluxed 2 hr gave 74% I (R = CN, R1 = Me, R2 = Ph, R3 = H) (II), m. 132-3° (EtOH). The following I (R = CN) were prepared similarly (R1, R2, R3, % yield , and m.p. given): Me, p-ClC6H4, H, 78, 163-4° (EtOH) Me, Me, H, 45-50, 138-9° (MeOH); Ph, Me, H, 97.5, 139° (MeOH); H, Me, H, 78, 130-1° (aqueous EtOH); Bu, Me, H, -, 81-2° (light petroleum); Me, Me, 7-Me, 75, 123-4° (aqueous MeOH); Ph, Me, 7-Me, 95, 186-7° (aqueous MeOH); p-MeOC6H4, Me, H, 40, -; and Me, Me, 6-OEt, 85, 78° (aqueous MeOH). A solution of 4 g III in 100 ml EtOH added to 8 g KOH in 20 ml H2O and the mixture refluxed 24 hr gave 2.5 g I (R = CO2H, R1 = Me, R2 = Ph, R3 = H), m. 195-7° (MeOH). The following I (R = CO2H) were similarly prepared (R1, R2, R3, % yield, and m.p. given): Me, Me, H (IV), 92, 197-8° (decomposition) (MeOH); Ph, Me, H, 72, 225° (MeOH); H, Me, H, 53, 195-7° (MeOH); Bu, Me, H, 74, 190-1° (decomposition) (aqueous MeOH); Me, Me, 7-Me, 40, 204° (decomposition) (MeOH); Ph, Me, 7-Me, 87, 204° (decomposition) (aqueous MeOH); p-MeOC6H4, Me, H, 67.5, 189-90° (MeOH); and Me, Me, 6-OEt, 60, 187-8° (monohydrate), (MeOH). Treating the corresponding acids in MeOH with CH2N2 in Et2O at room temperature 3 hr gave the following I (R = CO2Me) (R1, R2, R3, % yield , and m.p. given): Me, Me, H, 96, 112-13° (light petroleum); H, Me, H, 83, 76-8° (aqueous Me2CO); and Ph, Me, 7-Me, 63, 107-8° (light petroleum). IV Na salt

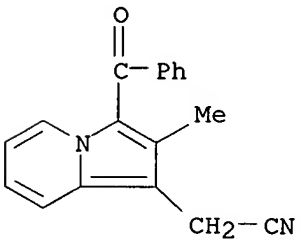
and 1 equivalent Et2NCH2CH2Cl in iso-PrOH refluxed 5 hr gave 54% I (R = CO2CH2CH2NEt2, R1 = R2 = Me, R3 = H), b0.1 185-90°. Preparation and phys. data for many of the intermediates were given.

IT 26466-63-7P 26466-64-8P 26466-65-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

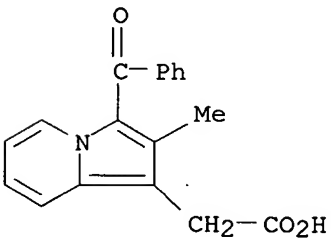
RN 26466-63-7 CAPLUS
CN Ketone, 1-[(dimethylamino)methyl]-2-methyl-3-indolizinyl phenyl (8CI) (CA INDEX NAME)




RN 26466-64-8 CAPLUS
CN 1-Indolizineacetonitrile, 3-benzoyl-2-methyl- (8CI) (CA INDEX NAME)




RN 26466-65-9 CAPLUS
CN 1-Indolizineacetic acid, 3-benzoyl-2-methyl- (8CI) (CA INDEX NAME)



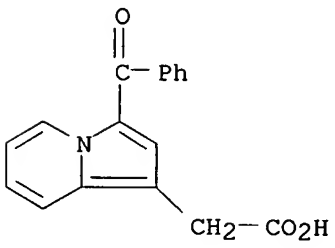

L4 ANSWER 53 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:77753 CAPLUS
DOCUMENT NUMBER: 70:77753
TITLE: Indolizines
AUTHOR(S): Cardellini, Mario; Ottolino, Sabino; Tafaro, Pietro
CORPORATE SOURCE: Inst. Chim. Farm. Tossicol., Univ. Bari, Bari, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1968), 58(11), 1206-13
CODEN: ANCRAI; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI For diagram(s), see printed CA Issue.
AB Some substituted indolizine derivs. (I) were prepared Indolizine-1-acetic

acid is the structural analog of indole-3-acetic acid (heteroauxin) and showed some auxin-like activity in preliminary tests. A solution of 8 g. Et diazoacetate in 100 cc. C6H6 was added dropwise to a boiling solution of 4 g. 3-benzoylindolizine (II) in 100 cc. C6H6 containing a small amount Cu2Cl2. After cooling and filtering the solution was evaporated to leave an oil which was taken up in a 4:1 H2O-EtOH mixture A 25% solution of NaOH was added and the mixture was refluxed 3 hrs. The solution was concentrated and acidified with 2N HCl to give a precipitate of 2.5 g. I (R = Bz, R' = CH2CO2H) (Ia), m. 191.3°. Ia (0.2 g.) was dissolved in 10 cc. of 4N HCl and refluxed 40 min. to give 0.1 g. 1-carboxymethyl-3H-indolizinium chloride, m. 184-6°. A solution of 8 g. II, 3.5 g. Me2NH.HCl, and 3.5 g. 40% HCHO in 250 cc. EtOH was heated at 95° 8 hrs. The EtOH was removed and the residue was dissolved in boiling H2O leaving a small amount of insol. bis(3-benzoylindolizin-1-yl)methane, m. 190°. The H2O solution gave 7 g. 1-(dimethylaminomethyl)-3-benzoylindolizine (III), m. 206-8°. III (24 g.) was added slowly to a 2N solution of NaH to give 20 g. of a yellow oil which crystallized to form I (R = Bz, R' = CH2NMe2) (IV), m. 82-3°. IV (30 g.) was treated with 6.5 g. MeI in 250 cc. EtOH and allowed to stand 12 hrs., to give 40 g. I (R = Bz, R' = CH2N+Me3I-) (V), m. 197°. Na (1.5 g.) was mixed with 13.5 g. Et acetamidomaleonate in 100 cc. dioxane and stirred at 90° to disperse the Na. V (25 g.) in 350 cc. dioxane was added and the mixture refluxed 30 hrs. to give 15 g. I [R = Bz, R' = CH2C(CO2Et)2NHAc] (VI), m. 196-7°. VI (14 g.) was refluxed with 6 g. NaH in 70 cc. H2O and neutralized with HCl to give 10 g. I [R = Bz, R' = CH2C(CO2H)2NHAc] (VII), m. 171-3°. VII (1.5 g.) was suspended in 8 cc. H2O and heated at 110° 2 hrs. under pressure to give 1.2 g. I [R = Bz, R' = CH2CH(CO2H)(NHAc)] (VIII), m. 201-2°. VII (7 g.) was refluxed in 60 cc. 5N HCl 2 hrs. to give 2.7 g. α-amino-β-(indolizin-1-yl)propionic acid (IX) m. 234-6°. VIII (2 g.) was refluxed 1 hr. in 50 cc. 4N HCl to give 0.6 g. IX. IX (0.5 g.) was dissolved in 7 cc. N NaOH and 0.3 cc. BzCl was added dropwise over 30 min. A solution of 2N HCl was added to give a pH of 4-5 and 0.3 g. of I [R = H, R' = CH2CH(CO2H)(NHBz)], m. 171-4°, was precipitated IX (0.25 g.) was treated with 10 cc. BzCl in 40 cc. C6H6 and allowed to stand at room temperature for 48 hrs. to give 0.15 g. I [R = Bz, R' = CH2CH(CO2H)(NHBz)], m. 256-7°. The derivs. were characterized from ir and uv spectra.

IT 21640-36-8P 21640-38-0P 21640-39-1P
21640-40-4P 21640-41-5P 21640-42-6P
21640-43-7P 21640-46-0P 21728-16-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

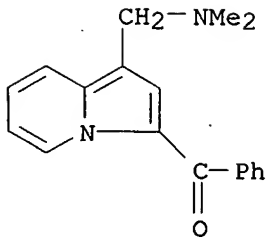
RN 21640-36-8 CAPLUS

CN 1-Indolizineacetic acid, 3-benzoyl- (8CI) (CA INDEX NAME)



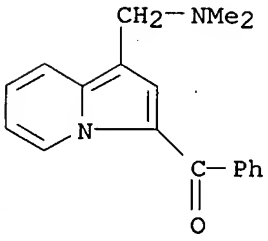

RN 21640-38-0 CAPLUS

CN Ketone, 1-[(dimethylamino)methyl]-3-indolizinyl phenyl, monohydrochloride (8CI) (CA INDEX NAME)

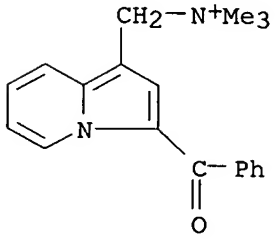


● HCl

RN 21640-39-1 CAPLUS
CN Ketone, 1-[(dimethylamino)methyl]-3-indolizinyl phenyl (8CI) (CA INDEX NAME)

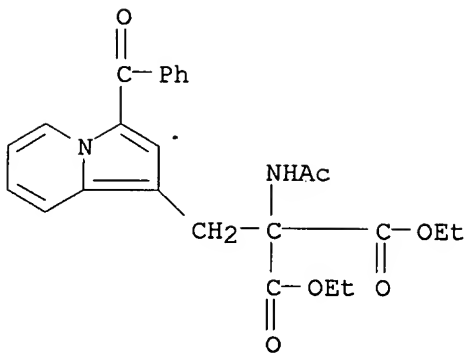


RN 21640-40-4 CAPLUS
CN Ammonium, [(3-benzoyl-1-indolizinyl)methyl]trimethyl-, iodide (8CI) (CA INDEX NAME)

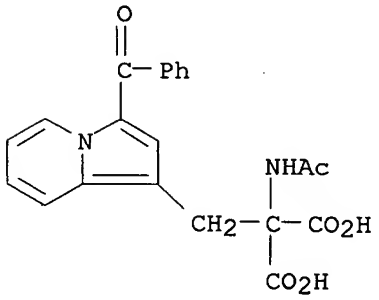


● $I^-$

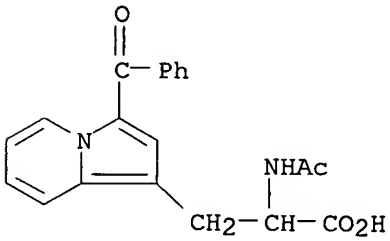
RN 21640-41-5 CAPLUS
CN Malonic acid, acetamido[(3-benzoyl-1-indolizinyl)methyl]-, diethyl ester (8CI) (CA INDEX NAME)



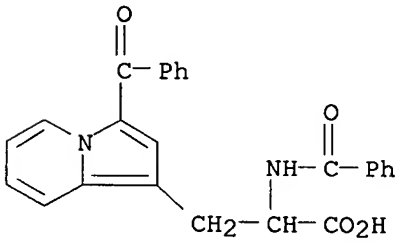
RN 21640-42-6 CAPLUS
CN Malonic acid, acetamido[(3-benzoyl-1-indolizinyl)methyl]- (8CI) (CA INDEX NAME)



RN 21640-43-7 CAPLUS
CN 1-Indolizinepropionic acid, α-acetamido-3-benzyl- (8CI) (CA INDEX NAME)

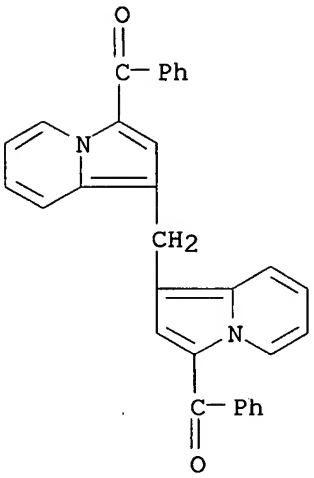


RN 21640-46-0 CAPLUS
CN 1-Indolizinepropionic acid, α-benzamido-3-benzoyl- (8CI) (CA INDEX NAME)

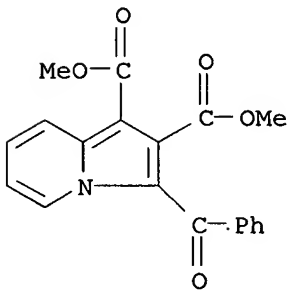


RN 21728-16-5 CAPLUS

CN Indolizine, 1,1'-methylenebis[3-benzoyl- (8CI) (CA INDEX NAME)

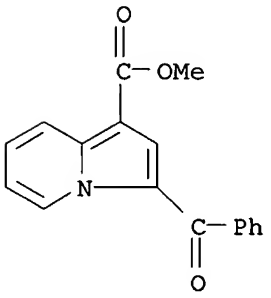


L4 ANSWER 54 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1968:49411 CAPLUS
DOCUMENT NUMBER: 68:49411
TITLE: Pyridinium ylides in synthesis. III. Synthesis of indolizines
AUTHOR(S): Henrick, C. A.; Ritchie, E.; Taylor, Walter Charles
CORPORATE SOURCE: Univ. Sydney, Sydney, Australia
SOURCE: Australian Journal of Chemistry (1967), 20(11), 2467-77
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Treatment of pyridinium, quinolinium, and isoquinolinium ylides with acetylenes yields indolizine, such as I, derivs. Pyridinium phenacylide with iodine in dimethylacetamide gives 1,2,3-tribenzoylindolizine. Decomposition of pyridinium phenacylide in the presence of copper or copper oxide affords 1,3-dibenzoylindolizine. 20 references.
IT 17281-78-6P 17281-79-7P 17281-90-2P
17281-91-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 17281-78-6 CAPLUS
CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)

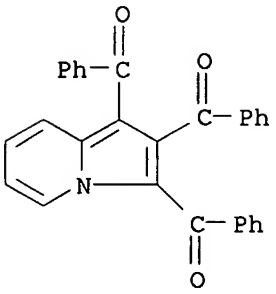


RN 17281-79-7 CAPLUS

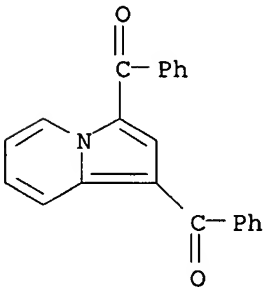
CN 1-Indolizinecarboxylic acid, 3-benzoyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



RN 17281-90-2 CAPLUS
CN Methanone, 1,2,3-indolizinetriyltris[phenyl- (9CI) (CA INDEX NAME)



RN 17281-91-3 CAPLUS
CN Methanone, 1,3-indolizinediylbis[phenyl- (9CI) (CA INDEX NAME)



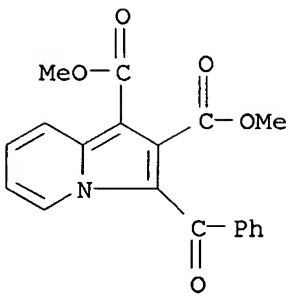
L4 ANSWER 55 OF 55 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1961:54302 CAPLUS
DOCUMENT NUMBER: 55:54302
ORIGINAL REFERENCE NO.: 55:10447f-i,10448a-d
TITLE: The formation of pyrrocolines by the reaction of dimethyl acetylenedicarboxylate with heterocyclic zwitterions
AUTHOR(S): Boekelheide, V.; Fahrenholtz, K.
CORPORATE SOURCE: Univ. of Rochester, Rochester, NY
SOURCE: Journal of the American Chemical Society (1961), 83, 458-62
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The heterocyclic zwitterions from 1-phenacylpyridinium bromide (I), 1-phenacyl-2,5-dimethylpyrazinium bromide (II), and 1-phenacylpyrindanium bromide (III) yielded with (.tplbond.CCO2Me) (IV) the corresponding pyrrocoline or azapyrrocoline derivs. 2-Phenylpyrrocoline (V) (3.86 g.) and 2.9 g. IV in 100 cc. PhMe refluxed 20 hrs. under N with 3.0 g. 5% Pd-C yielded 0.826 g. unchanged V and 1.99 g. di-Me ester (VI) of 1,2-dicarboxy-3-phenylcycl[3.2.2]azine (VII), pale yellow needles, m. 139-40° (Me2CO) (all m.ps. corrected). VI (814 mg.) heated 10 hrs. at 50° with 50 cc. 5% KOH-MeOH gave 724 mg. VII, m. 202-5°. VII (350 mg.) and 300 mg. Cu chromite in 20 cc. quinoline heated at 220° under N until CO2 evolution ceased, filtered, poured onto ice, acidified with HCl, and extracted with Et2O gave 2-phenylcycl[3.2.2]azine, yellow, m. 94-5° (sublimed). BzCH2Br (25.0 g.) and 16 cc. 2,5-dimethylpyrazine heated 1 hr. at 55° gave 31.7 g. II, m. 208-10° (MeOH); picrate, yellow, m. 129-30° (EtOH). II (2.0 g.) in 50 cc. H2O treated with excess Na2CO3, the mixture extracted with CHCl3, the solution passed through Al2O3, evaporated, the unstable, orange solid residue, m. 110°, dissolved immediately in 100 cc. PhMe, and refluxed 16 hrs. under N with 2.5 g. IV and 1.5 g. 5% Pd-C yielded 120 mg. 3-Bz derivative (VIII) of IX, yellow, m. 128-9° (Me2CO), and 280 mg. IX, m. 171-2° (C6H6); IX.HBr, needles, m. 219-21°. 1,2,5-Trimethylpyrazinium iodide (2.0 g.) in 50 cc. H2O treated with excess Na2CO3 and extracted overnight with 100 cc. CHCl3 containing 0.90 g. IV and 1.0 g. 5% Pd-C yielded 23 mg. IX, m. 168-70°. VIII (300 mg.) and 2 g. BzCH2Br in 30 cc. MeOH kept 7 days at room temperature and evaporated in vacuo yielded 300 mg. 3-Bz derivative of 1,2-dicarbomethoxy-5-methyl-9-phenyldipyrrolo[a,c]pyrazine (X), yellow, m. 201-2° (PhMe). IX (611 mg.) and 465 mg. BzCH2Br in 20 cc. HCONMe2 heated 24 hrs. at 80°, poured into H2O, and extracted with Et2O yielded 350 mg. X, yellow needles, m. 201-2° (EtOH-Me2CO). X (300 mg.) in alc. KOH refluxed 1 hr. and the resulting acid (295 mg.) decarboxylated in the usual manner with 100 mg. Cu chromite and 20 cc. quinoline gave 160 mg. 2-phenyl-6-methyldipyrrolo[a,c]pyrazine, yellow prisms, m. 195.5-6.0° (Me2CO). II (5.0 g.) in 50 cc. H2O treated with solid Na2CO3, the mixture extracted with CHCl3, and the residue from the extract refluxed 20 hrs. under N in 100 cc. PhMe with 2.56 g. IV and 2.0 g. 5% Pd-C yielded 1.10 g. 1,2-dicarbomethoxy-3-benzoylpyrrocoline (XI), m. 165-6° (Me2CO). XI (100 mg.) heated 6 hrs. at 50° with KOH-MeOH gave 59 mg. 3-benzoylpyrrocoline-2-carboxylic acid (XII), pale yellow, m. 164-6° (Me2CO). XII (130 mg.) in concentrated HCl refluxed 1 hr. gave 47 mg. pyrrocoline-2-carboxylic acid, pale yellow, m. 244-6° (decomposition) (sublimed). Pyrindan (10.54 g.) and 17.6 g. BzCH2Br in 200 cc. 1:1 Et2O-CHCl3 kept 16 hrs. at room temperature, heated 6 hrs. at 50°, and evaporated gave 28 g. III, needles, m. 168-9.5° (EtOH-EtOAc). III (2.0 g.) in 20 cc. H2O treated with excess Na2CO3 and the unstable solid orange residue from the extract refluxed 6 hrs. under N with 0.90 g. IV and 2.0 g. 5% Pd-C in PhMe yielded 165 mg. 1,2-dicarbomethoxy-3-benzoyl-5,6-trimethylenepyrrocoline, yellow prisms, m. 160.5-1.5° (EtOH).

IT 17281-78-6P, 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester
RL: PREP (Preparation)
(preparation of)

RN 17281-78-6 CAPLUS

CN 1,2-Indolizinedicarboxylic acid, 3-benzoyl-, dimethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)

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L3             279 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 07:42:32 ON 27 JUN 2007
L4              55 S L3 FULL

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L3             279 S L1 FULL

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L4              55 S L3 FULL

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